

Handbook of SAS® Data Step Programming

Execution Phase of Program 5.17

Arthur Li

Execution Phase of Program 5.17

```
➔ data ex5_17(drop=i);  
    do i = 1 to 3;  
        next = "C:\text" || put(i, 1.) || ".txt";  
        do until (last);  
            infile dummy filevar = next end=last;  
            input id $ sbp;  
            output;  
        end;  
    end;  
    stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|------|---|------|---|----|---|-----|---|
| 1 | | . | | | | 0 | | | | . | |

At the beginning of the DATA step:

❖ $_N_ \leftarrow 1$

❖ $LAST \leftarrow 0$

❖ Other variables \leftarrow *missing*

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  ➔ do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|------|---|------|---|----|---|-----|---|
| 1 | | 1 | | | | 0 | | | | . | |



1st Iteration of the DO loop (outer loop):

❖ $I \leftarrow 1$

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    ➔ next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 0 | | | | . | |



1st Iteration of the DO loop (outer loop):

❖ FILENAME ← C:\text1.txt

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    ➔ do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 0 | | | | . | |



1st Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

❖ The DO UNTIL loop evaluates the condition at the end of the loop

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      ➔ infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 0 | | | | . | |



Input buffer:

| | | | | | | |
|---|---|---|---|---|---|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | ... |
| 0 | 1 | | 1 | 4 | 5 | ... |

1st Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

❖ INFILE reads:

1st data line' from text1.txt' → input buffer

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      infile dummy filevar = next end=last;  
      → input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 0 | | 01 | | 145 | |



Input buffer:

| | | | | | | |
|---|---|---|---|---|---|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | ... |
| 0 | 1 | | 1 | 4 | 5 | ... |

1st Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

❖ INPUT statement reads data values:
input buffer → PDV

Execution Phase of Program 5.17

```

data ex5_17(drop=i);
  do i = 1 to 3;
    next = "C:\text" || put(i, 1.) || ".txt";
    do until (last);
      infile dummy filevar = next end=last;
      input id $ sbp;
      → output;
    end;
  end;
stop;
run;

```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 0 | | 01 | | 145 | |



1st Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

❖ OUTPUT statement:
PDV → output dataset

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| 1 | 2 | 3 | 4 | 5 | 6 | ... |
|---|---|---|---|---|---|-----|
| 0 | 1 | | 1 | 4 | 5 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
      → end;  
    end;  
    stop;  
  run;
```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 0 | | 01 | | 145 | |



1st Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

- ❖ SAS reaches the end of the inner loop
- ❖ Since LAST ≠ 1, the inner loop continues

text1.txt:

| | |
|----|-----|
| 01 | 145 |
|----|-----|

| | |
|----|-----|
| 02 | 119 |
|----|-----|

text2.txt:

| | |
|----|-----|
| 03 | 126 |
|----|-----|

| | |
|----|-----|
| 04 | 106 |
|----|-----|

text3.txt:

| | |
|----|-----|
| 05 | 140 |
|----|-----|

| | |
|----|-----|
| 06 | 118 |
|----|-----|

Input buffer:

| 1 | 2 | 3 | 4 | 5 | 6 | ... |
|---|---|---|---|---|---|-----|
| 0 | 1 | | 1 | 4 | 5 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    → do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 0 | | 01 | | 145 | |

1st Iteration of the DO loop (outer loop):

2nd Iteration of the DO UNTIL loop (inner loop):

❖ The DO UNTIL loop evaluates the condition at the end of the loop

text1.txt:

| | |
|----|-----|
| 01 | 145 |
|----|-----|

| | |
|----|-----|
| 02 | 119 |
|----|-----|

text2.txt:

| | |
|----|-----|
| 03 | 126 |
|----|-----|

| | |
|----|-----|
| 04 | 106 |
|----|-----|

text3.txt:

| | |
|----|-----|
| 05 | 140 |
|----|-----|

| | |
|----|-----|
| 06 | 118 |
|----|-----|

Input buffer:

| | | | | | | |
|---|---|---|---|---|---|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | ... |
| 0 | 1 | | 1 | 4 | 5 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |

Execution Phase of Program 5.17

```

data ex5_17(drop=i);
  do i = 1 to 3;
    next = "C:\text" || put(i, 1.) || ".txt";
    do until (last);
      → infile dummy filevar = next end=last;
      input id $ sbp;
      output;
    end;
  end;
  stop;
run;

```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 1 | | 01 | | 145 | |



1st Iteration of the DO loop (outer loop):

2nd Iteration of the DO UNTIL loop (inner loop):

- ❖ INFILE reads: 2nd data line from 'text1.txt' → input buffer
- ❖ LAST ← 1

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| 1 | 2 | 3 | 4 | 5 | 6 | ... |
|---|---|---|---|---|---|-----|
| 0 | 2 | | 1 | 1 | 9 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |

Execution Phase of Program 5.17

```

data ex5_17(drop=i);
  do i = 1 to 3;
    next = "C:\text" || put(i, 1.) || ".txt";
    do until (last);
      infile dummy filevar = next end=last;
      → input id $ sbp;
      output;
    end;
  end;
stop;
run;

```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 1 | | 02 | | 119 | |



1st Iteration of the DO loop (outer loop):

2nd Iteration of the DO UNTIL loop (inner loop):

❖ The INPUT statement reads data values:
input buffer → PDV

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| 1 | 2 | 3 | 4 | 5 | 6 | ... |
|---|---|---|---|---|---|-----|
| 0 | 2 | | 1 | 1 | 9 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |

Execution Phase of Program 5.17

```

data ex5_17(drop=i);
  do i = 1 to 3;
    next = "C:\text" || put(i, 1.) || ".txt";
    do until (last);
      infile dummy filevar = next end=last;
      input id $ sbp;
      → output;
    end;
  end;
stop;
run;

```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 1 | | 02 | | 119 | |



1st Iteration of the DO loop (outer loop):

2nd Iteration of the DO UNTIL loop (inner loop):

❖ OUTPUT statement:
PDV → output dataset

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| 1 | 2 | 3 | 4 | 5 | 6 | ... |
|---|---|---|---|---|---|-----|
| 0 | 2 | | 1 | 1 | 9 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
      ➔ end;  
    end;  
    stop;  
  run;
```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 1 | | 02 | | 119 | |



1st Iteration of the DO loop (outer loop):

2nd Iteration of the DO UNTIL loop (inner loop):

- ❖ SAS reaches the end of the inner loop
- ❖ Since LAST = 1, the inner loop ends

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| | | | | | | |
|---|---|---|---|---|---|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | ... |
| 0 | 2 | | 1 | 1 | 9 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  → end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 1 | | C:\text1.txt | | 1 | | 02 | | 119 | |

1st Iteration of the DO loop (outer loop):

❖ SAS reaches the end of the outer loop

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  ➔ do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 2 | | C:\text1.txt | | 1 | | 02 | | 119 | |



2nd Iteration of the DO loop (outer loop):

❖ I ↑ 2

❖ since $I \leq 3$, the 2nd iteration of the outer loop continues

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    ➔ next = "C:\text" || put(i, 1.) || ".txt";  
    do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 2 | | C:\text2.txt | | 1 | | 02 | | 119 | |



2nd Iteration of the DO loop (outer loop):

❖ FILENAME ← C:\text2.txt

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |

Execution Phase of Program 5.17

```
data ex5_17(drop=i);  
  do i = 1 to 3;  
    next = "C:\text" || put(i, 1.) || ".txt";  
    → do until (last);  
      infile dummy filevar = next end=last;  
      input id $ sbp;  
      output;  
    end;  
  end;  
  stop;  
run;
```

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 2 | | C:\text2.txt | | 1 | | 02 | | 119 | |



2nd Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

❖ The DO UNTIL loop evaluates the condition at the end of the loop

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |

Execution Phase of Program 5.17

```

data ex5_17(drop=i);
  do i = 1 to 3;
    next = "C:\text" || put(i, 1.) || ".txt";
    do until (last);
      → infile dummy filevar = next end=last;
      input id $ sbp;
      output;
    end;
  end;
stop;
run;

```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 2 | | C:\text2.txt | | 0 | | 02 | | 119 | |



2nd Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

- ❖ INFILE reads: 1st data line from 'text2.txt' → input buffer
- ❖ Not the last record of 'text2.txt', LAST ← 0

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| | 1 | 2 | 3 | 4 | 5 | 6 | ... |
|--|---|---|---|---|---|---|-----|
| | 0 | 3 | | 1 | 2 | 6 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |

Execution Phase of Program 5.17

```

data ex5_17(drop=i);
  do i = 1 to 3;
    next = "C:\text" || put(i, 1.) || ".txt";
    do until (last);
      infile dummy filevar = next end=last;
      → input id $ sbp;
      output;
    end;
  end;
stop;
run;

```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 2 | | C:\text2.txt | | 0 | | 03 | | 126 | |



2nd Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

❖ INPUT statement reads data values:
input buffer → PDV

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| 1 | 2 | 3 | 4 | 5 | 6 | ... |
|---|---|---|---|---|---|-----|
| 0 | 3 | | 1 | 2 | 6 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |

Execution Phase of Program 5.17

```

data ex5_17(drop=i);
  do i = 1 to 3;
    next = "C:\text" || put(i, 1.) || ".txt";
    do until (last);
      infile dummy filevar = next end=last;
      input id $ sbp;
      → output;
    end;
  end;
stop;
run;

```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 2 | | C:\text2.txt | | 0 | | 03 | | 126 | |



2nd Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

❖ OUTPUT statement:
PDV → output dataset

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| 1 | 2 | 3 | 4 | 5 | 6 | ... |
|---|---|---|---|---|---|-----|
| 0 | 3 | | 1 | 2 | 6 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |
| 3 | 03 | 126 |

Execution Phase of Program 5.17

```

data ex5_17(drop=i);
  do i = 1 to 3;
    next = "C:\text" || put(i, 1.) || ".txt";
    do until (last);
      infile dummy filevar = next end=last;
      input id $ sbp;
      → output;
    end;
  end;
stop;
run;

```

| _N_ | D | I | D | NEXT | D | LAST | D | ID | K | SBP | K |
|-----|---|---|---|--------------|---|------|---|----|---|-----|---|
| 1 | | 2 | | C:\text2.txt | | 0 | | 03 | | 126 | |



2nd Iteration of the DO loop (outer loop):

1st Iteration of the DO UNTIL loop (inner loop):

❖ Skip the rest....

text1.txt:

| | |
|----|-----|
| 01 | 145 |
| 02 | 119 |

text2.txt:

| | |
|----|-----|
| 03 | 126 |
| 04 | 106 |

text3.txt:

| | |
|----|-----|
| 05 | 140 |
| 06 | 118 |

Input buffer:

| | 1 | 2 | 3 | 4 | 5 | 6 | ... |
|---|---|---|---|---|---|---|-----|
| 0 | 3 | | | 1 | 2 | 6 | ... |

Ex5_17:

| | ID | SBP |
|---|----|-----|
| 1 | 01 | 145 |
| 2 | 02 | 119 |
| 3 | 03 | 126 |