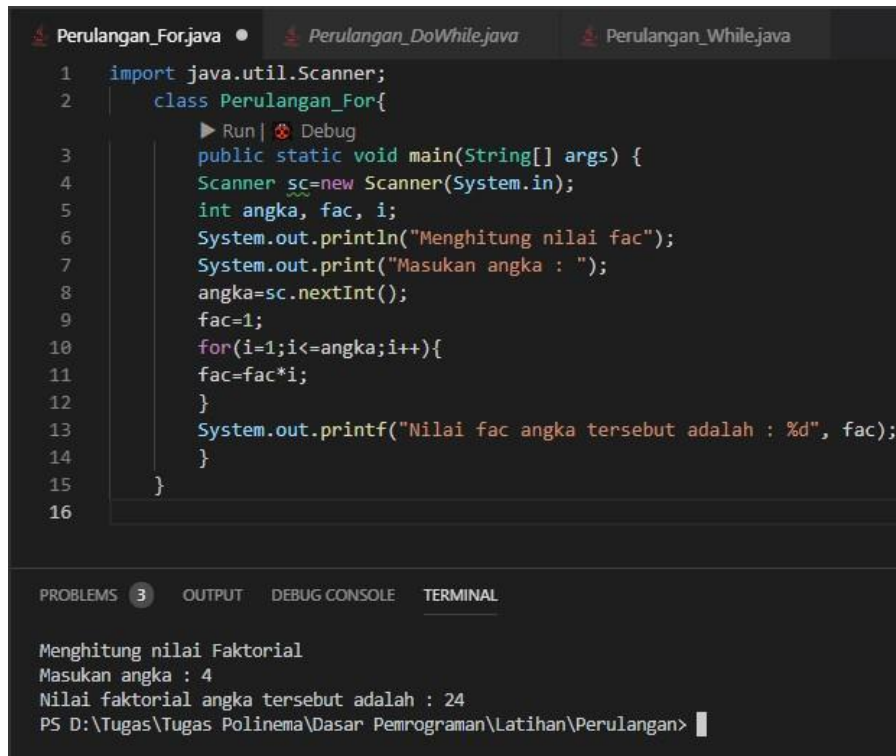


Jobsheet 6

Praktikum

1. For

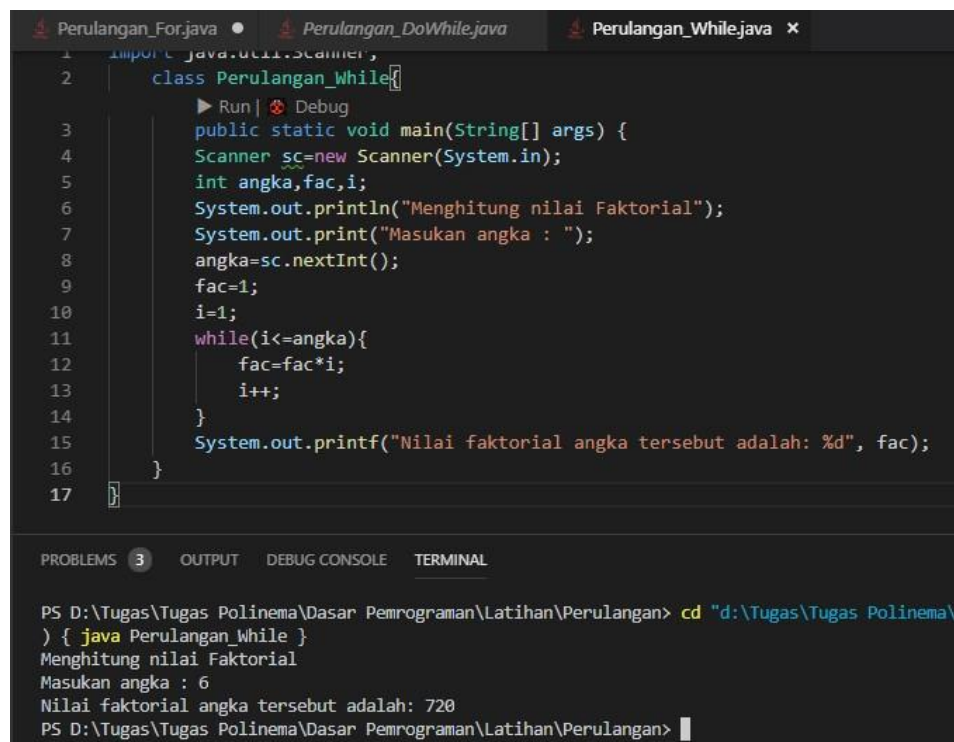


```
Perulangan_For.java • Perulangan_DoWhile.java Perulangan_While.java
1  import java.util.Scanner;
2      class Perulangan_For{
3          ▶ Run | ⚙ Debug
4          public static void main(String[] args) {
5              Scanner sc=new Scanner(System.in);
6              int angka, fac, i;
7              System.out.println("Menghitung nilai fac");
8              System.out.print("Masukan angka : ");
9              angka=sc.nextInt();
10             fac=1;
11             for(i=1;i<=angka;i++){
12                 fac=fac*i;
13             }
14             System.out.printf("Nilai fac angka tersebut adalah : %d", fac);
15         }
16     }
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL

Menghitung nilai Faktorial
Masukan angka : 4
Nilai faktorial angka tersebut adalah : 24
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan>

While

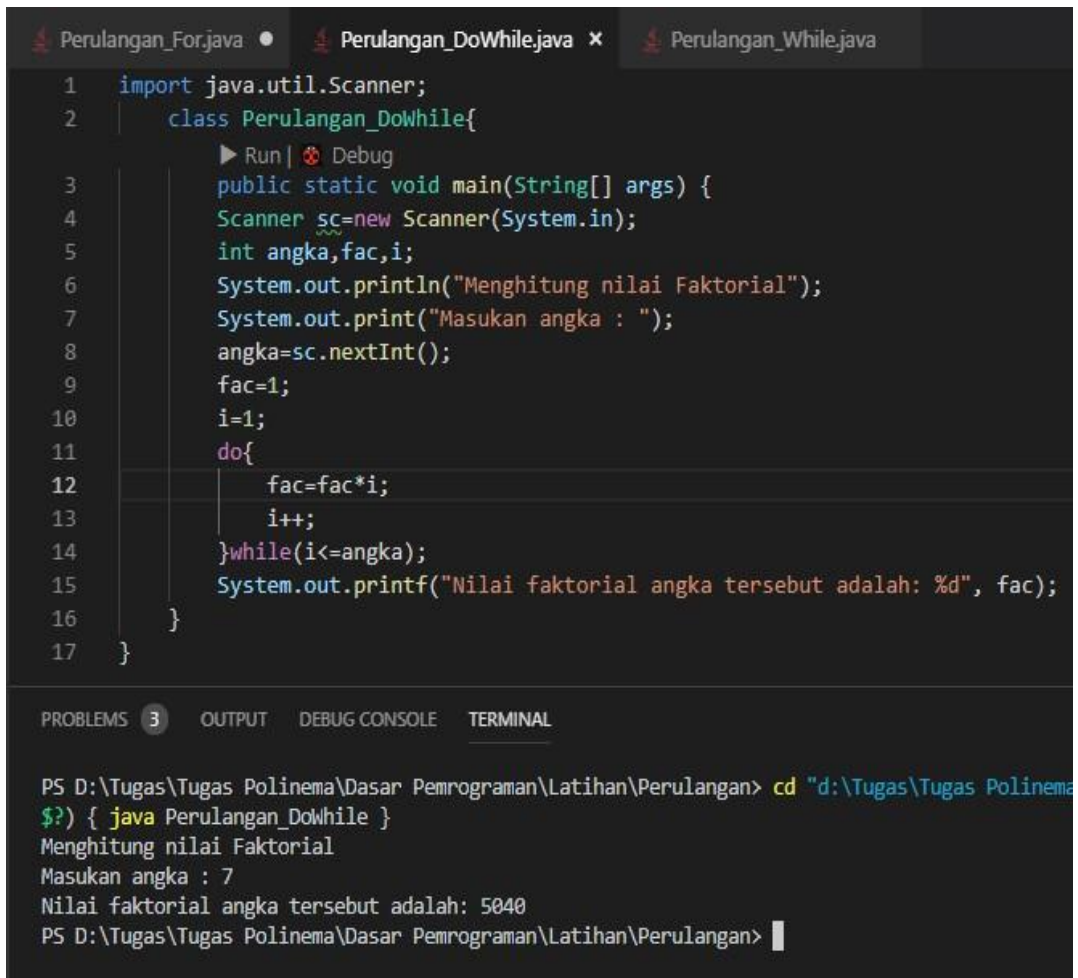


```
Perulangan_For.java • Perulangan_DoWhile.java Perulangan_While.java x
1  import java.util.Scanner;
2      class Perulangan_While{
3          ▶ Run | ⚙ Debug
4          public static void main(String[] args) {
5              Scanner sc=new Scanner(System.in);
6              int angka,fac,i;
7              System.out.println("Menghitung nilai Faktorial");
8              System.out.print("Masukan angka : ");
9              angka=sc.nextInt();
10             fac=1;
11             i=1;
12             while(i<=angka){
13                 fac=fac*i;
14                 i++;
15             }
16             System.out.printf("Nilai faktorial angka tersebut adalah: %d", fac);
17         }
18     }
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL

PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> cd "d:\Tugas\Tugas Polinema\"
> { java Perulangan_While }
Menghitung nilai Faktorial
Masukan angka : 6
Nilai faktorial angka tersebut adalah: 720
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan>

Do While

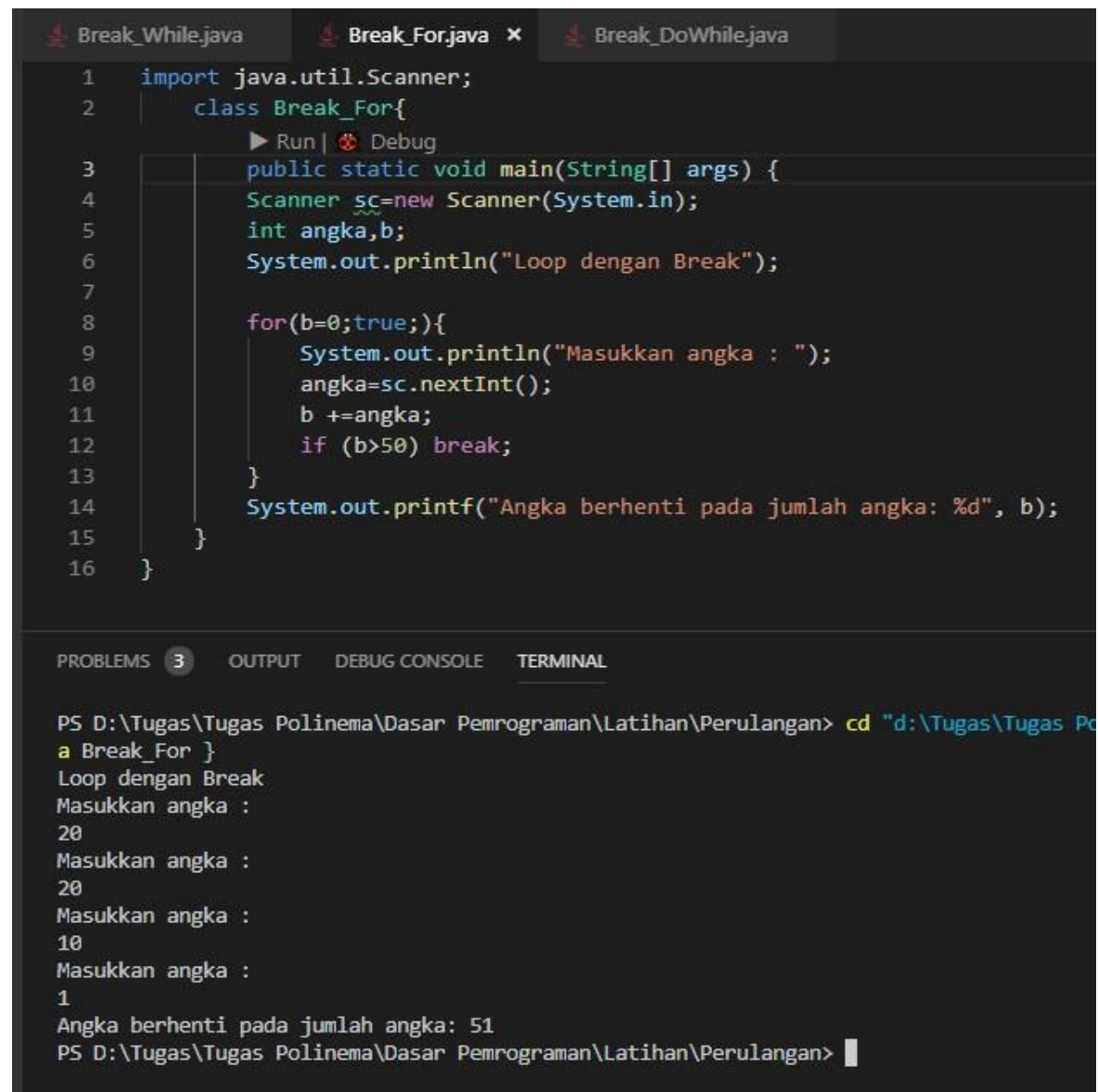


```
1 import java.util.Scanner;
2 class Perulangan_DoWhile{
3     ▶ Run | ⚙ Debug
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         int angka,fac,i;
7         System.out.println("Menghitung nilai Faktorial");
8         System.out.print("Masukan angka : ");
9         angka=sc.nextInt();
10        fac=1;
11        i=1;
12        do{
13            fac=fac*i;
14            i++;
15        }while(i<=angka);
16        System.out.printf("Nilai faktorial angka tersebut adalah: %d", fac);
17    }
}
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL

```
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> cd "d:\Tugas\Tugas Polinema"
$?) { java Perulangan_DoWhile }
Menghitung nilai Faktorial
Masukan angka : 7
Nilai faktorial angka tersebut adalah: 5040
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> |
```

3. For



```
Break_While.java  Break_For.java x  Break_DoWhile.java
1  import java.util.Scanner;
2  class Break_For{
3      ▶ Run | ⚙ Debug
4      public static void main(String[] args) {
5          Scanner sc=new Scanner(System.in);
6          int angka,b;
7          System.out.println("Loop dengan Break");
8          for(b=0;true;){
9              System.out.println("Masukkan angka : ");
10             angka=sc.nextInt();
11             b +=angka;
12             if (b>50) break;
13         }
14         System.out.printf("Angka berhenti pada jumlah angka: %d", b);
15     }
16 }
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL

```
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> cd "d:\Tugas\Tugas Po
a Break_For }
Loop dengan Break
Masukkan angka :
20
Masukkan angka :
20
Masukkan angka :
10
Masukkan angka :
1
Angka berhenti pada jumlah angka: 51
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> |
```

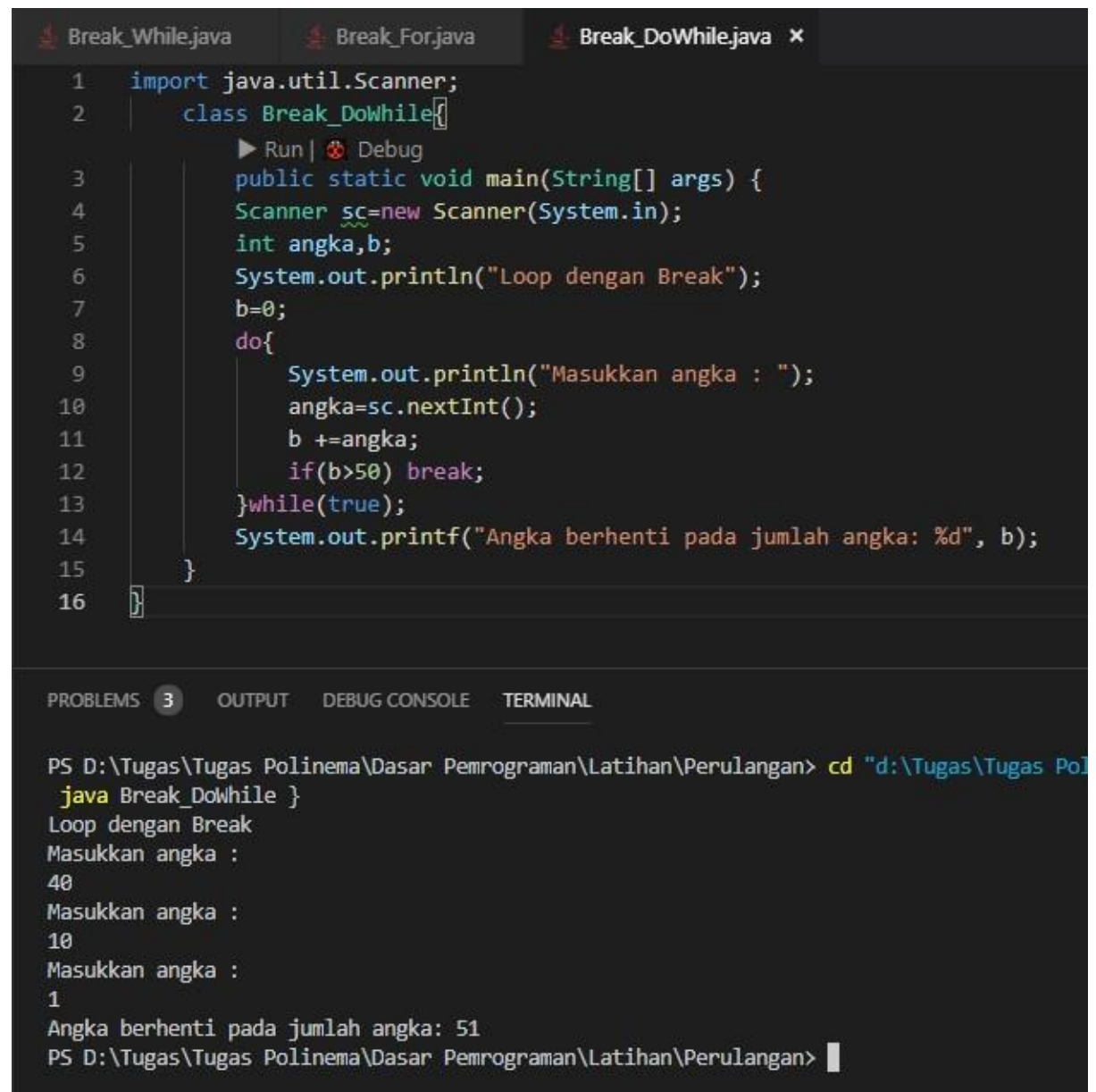
While

```
Break_While.java x Break_For.java Break_DoWhile.java
1 import java.util.Scanner;
2 class Break_While{
3     ▶ Run | ⚙ Debug
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         int angka,b;
7         System.out.println("Loop dengan Break");
8         b=0;
9
10        while(true){
11            System.out.print("Masukkan angka : ");
12            angka=sc.nextInt();
13            b +=angka;
14            if (b>50) break;
15        }
16        System.out.printf("Angka berhenti pada jumlah angka: %d", b);
17    }
}
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL

```
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> cd "d:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan" & java Break_While }
Loop dengan Break
Masukkan angka : 10
Masukkan angka : 10
Masukkan angka : 10
Masukkan angka : 10
Masukkan angka : 10
Masukkan angka : 1
Angka berhenti pada jumlah angka: 51
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> |
```

Do-While



The screenshot displays an IDE with three tabs: `Break_While.java`, `Break_For.java`, and `Break_DoWhile.java`. The `Break_DoWhile.java` tab is active, showing a Java program that uses a `do-while` loop to calculate the sum of numbers until the total exceeds 50. The code is as follows:

```
1 import java.util.Scanner;
2 class Break_DoWhile {
3     ▶ Run | ⚙ Debug
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         int angka,b;
7         System.out.println("Loop dengan Break");
8         b=0;
9         do{
10             System.out.println("Masukkan angka : ");
11             angka=sc.nextInt();
12             b +=angka;
13             if(b>50) break;
14         }while(true);
15         System.out.printf("Angka berhenti pada jumlah angka: %d", b);
16     }
```

Below the code editor, the **TERMINAL** tab is selected, showing the execution of the program:

```
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> cd "d:\Tugas\Tugas Po
java Break_DoWhile }
Loop dengan Break
Masukkan angka :
40
Masukkan angka :
10
Masukkan angka :
1
Angka berhenti pada jumlah angka: 51
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Latihan\Perulangan> |
```

5. Continue

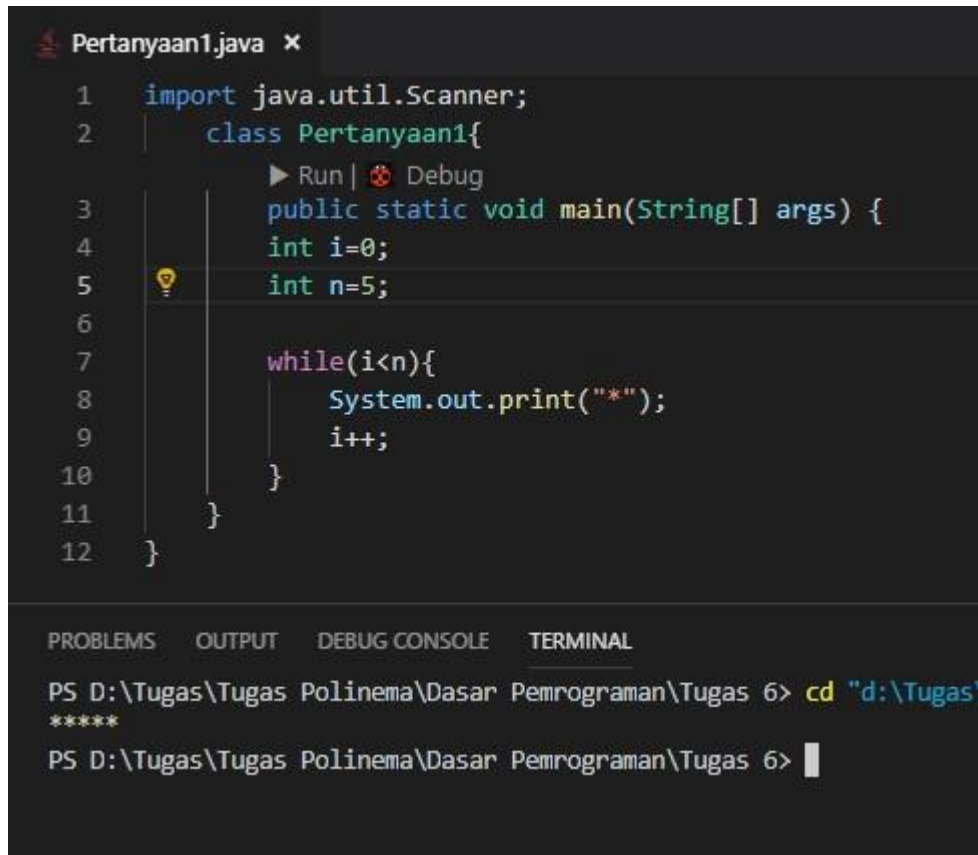
```
loopContinue.java x
1  import java.util.Scanner;
2  class loopContinue{
3      ▶ Run | ⚙ Debug
4      public static void main(String[] args) {
5          Scanner sc=new Scanner(System.in);
6          int angka,b,i,count;
7          double avg;
8          System.out.println("Loop dengan Continue");
9          b=0;
10         count=0;
11         for(i=0;i<4;i++){
12             System.out.println("Masukkan angka : ");
13             angka=sc.nextInt();
14             if (angka>=40) continue;
15             b += angka;
16             count++;
17         }
18         avg = (double)b/count;
19         System.out.printf("Rata-rata angka kurang dari 40: %.2f", avg);
20     }
}
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

Loop dengan Continue
Masukkan angka :
35
Masukkan angka :
37
Masukkan angka :
30
Masukkan angka :
32
Rata-rata angka kurang dari 40: 33.50

Pertanyaan

1.



The screenshot shows an IDE window titled 'Pertanyaan1.java'. The code is as follows:

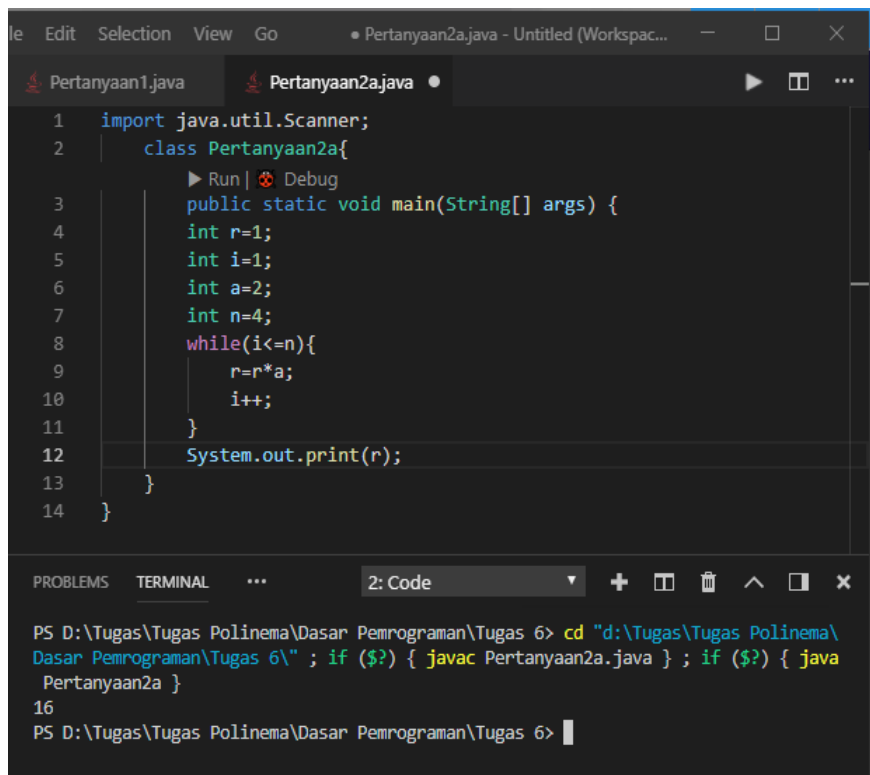
```
1 import java.util.Scanner;
2 class Pertanyaan1{
3     ▶ Run | ⚙ Debug
4     public static void main(String[] args) {
5         int i=0;
6         int n=5;
7
8         while(i<n){
9             System.out.print("*");
10            i++;
11        }
12    }
```

Below the code editor, the 'TERMINAL' tab is active, showing the command prompt output:

```
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Tugas 6> cd "d:\Tugas"
*****
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Tugas 6> |
```

Lebih aman menggunakan ($i < n$) , jika nilai n kurang dari 0 program akan langsung berhenti, namun jika menggunakan ($i != n$) dan nilai n kurang dari 0, pengulangan akan terus berjalan tanpa henti

2.

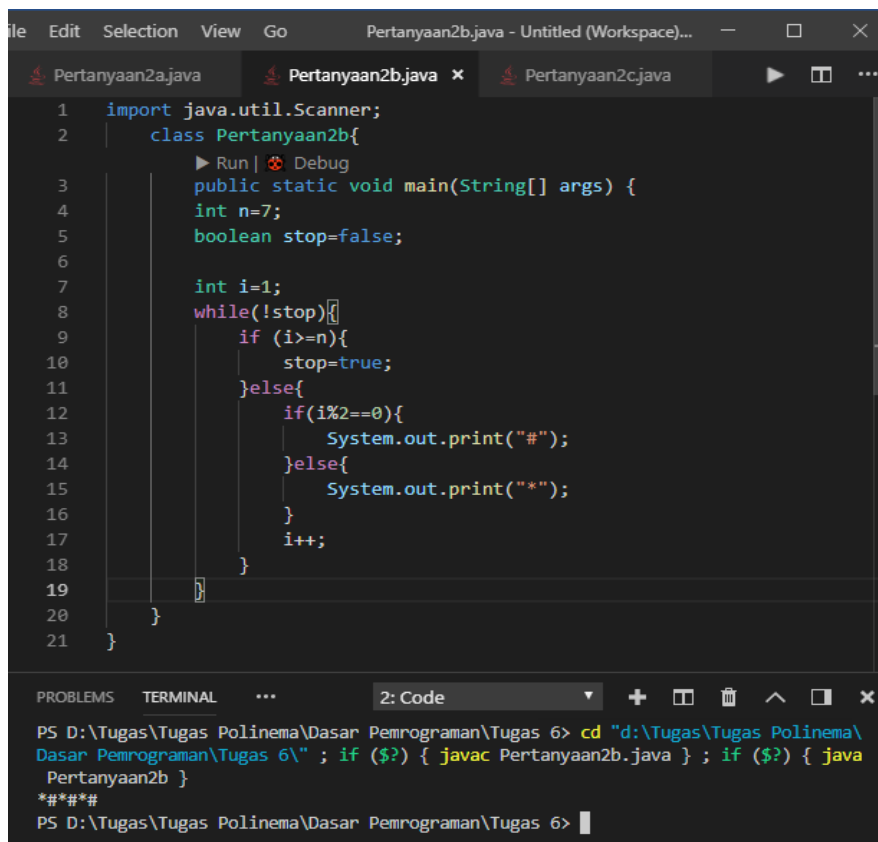


The screenshot shows an IDE window titled "Pertanyaan2a.java - Untitled (Workspac...". The code editor displays the following Java code:

```
1 import java.util.Scanner;
2 class Pertanyaan2a{
3     ▶ Run | ⚙ Debug
4     public static void main(String[] args) {
5         int r=1;
6         int i=1;
7         int a=2;
8         int n=4;
9         while(i<=n){
10             r=r*a;
11             i++;
12         }
13         System.out.print(r);
14     }
```

The terminal at the bottom shows the command prompt output:

```
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Tugas 6> cd "d:\Tugas\Tugas Polinema\
Dasar Pemrograman\Tugas 6\" ; if ($?) { javac Pertanyaan2a.java } ; if ($?) { java
Pertanyaan2a }
16
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Tugas 6> |
```



The screenshot shows an IDE window titled "Pertanyaan2b.java - Untitled (Workspace)...". The code editor displays the following Java code:

```
1 import java.util.Scanner;
2 class Pertanyaan2b{
3     ▶ Run | ⚙ Debug
4     public static void main(String[] args) {
5         int n=7;
6         boolean stop=false;
7
8         int i=1;
9         while(!stop){
10             if (i>=n){
11                 stop=true;
12             }else{
13                 if(i%2==0){
14                     System.out.print("#");
15                 }else{
16                     System.out.print("*");
17                 }
18                 i++;
19             }
20         }
21     }
```

The terminal at the bottom shows the command prompt output:

```
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Tugas 6> cd "d:\Tugas\Tugas Polinema\
Dasar Pemrograman\Tugas 6\" ; if ($?) { javac Pertanyaan2b.java } ; if ($?) { java
Pertanyaan2b }
*#*#*#
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Tugas 6> |
```


The screenshot shows an IDE with three tabs: `Pertanyaan2a.java`, `Pertanyaan2b.java`, and `Pertanyaan2c.java`. The `Pertanyaan2c.java` tab is active, displaying the following Java code:

```
1 import java.util.Scanner;
2 class Pertanyaan2c{
3     ▶ Run | ⚙ Debug
4     public static void main(String[] args) {
5         int n=1892;
6         int sum=0;
7
8         while(n>0){
9             int digit=n%10;
10            sum=sum+digit;
11            n=n/10;
12        }
13        System.out.println(sum);
14    }
```

Below the code editor is a terminal window with the following content:

```
PROBLEMS  TERMINAL  ...  2: Code
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Tugas 6> cd "d:\Tugas\Tugas Polinema\
Dasar Pemrograman\Tugas 6\" ; if ($?) { javac Pertanyaan2c.java } ; if ($?) { java
Pertanyaan2c }
20
PS D:\Tugas\Tugas Polinema\Dasar Pemrograman\Tugas 6> |
```

The status bar at the bottom indicates the cursor is at `Ln 12, Col 31`, with `Spaces: 4`, `UTF-8` encoding, and `CRLF` line endings. The system clock shows `9:44` on `23/10/2018`.