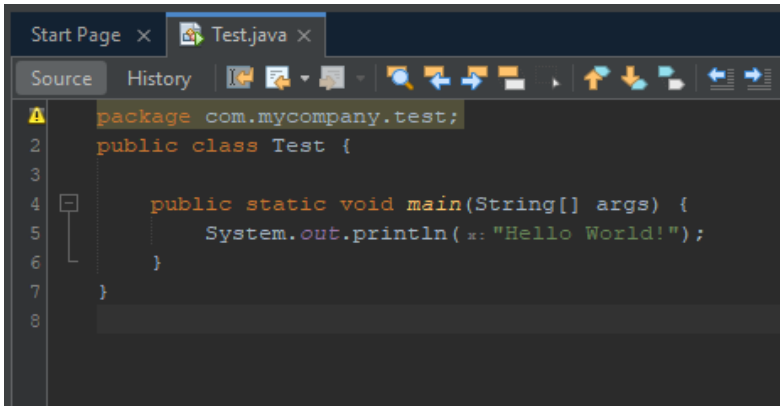


Practical 1.

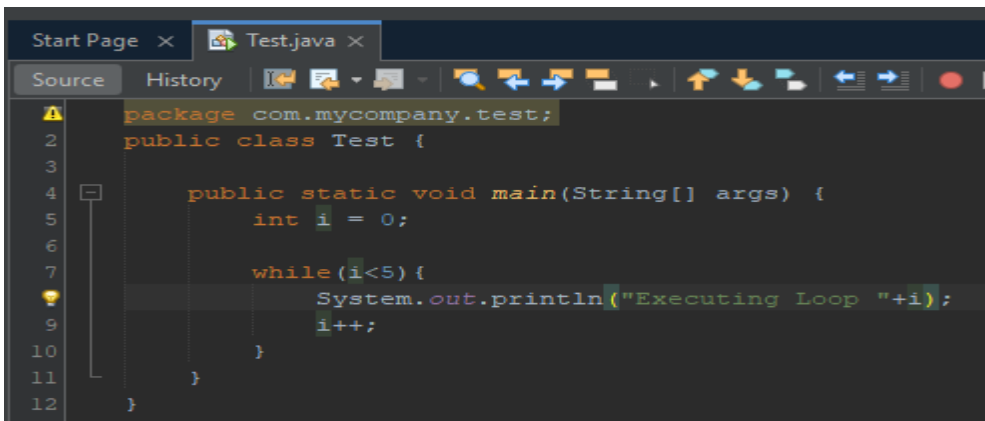
1.



```
Start Page x Test.java x
Source History
package com.mycompany.test;
public class Test {
    public static void main(String[] args) {
        System.out.println("Hello World!");
    }
}
```

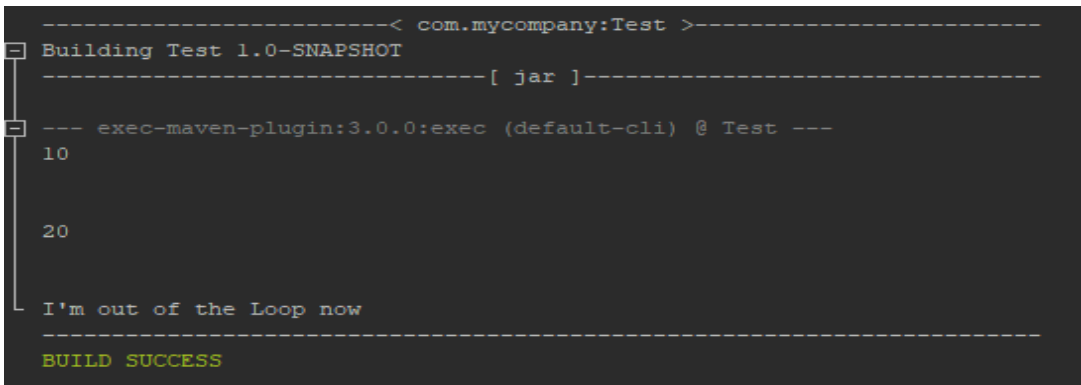
2.

3.



```
Start Page x Test.java x
Source History
package com.mycompany.test;
public class Test {
    public static void main(String[] args) {
        int i = 0;
        while(i<5){
            System.out.println("Executing Loop "+i);
            i++;
        }
    }
}
```

4.



```
-----< com.mycompany:Test >-----
Building Test 1.0-SNAPSHOT
-----[ jar ]-----

--- exec-maven-plugin:3.0.0:exec (default-cli) @ Test ---
10

20

I'm out of the Loop now
-----
BUILD SUCCESS
-----
```

```

-----< com.mycompany:Test >-----
Building Test 1.0-SNAPSHOT
-----[ jar ]-----

--- exec-maven-plugin:3.0.0:exec (default-cli) @ Test ---
10

20

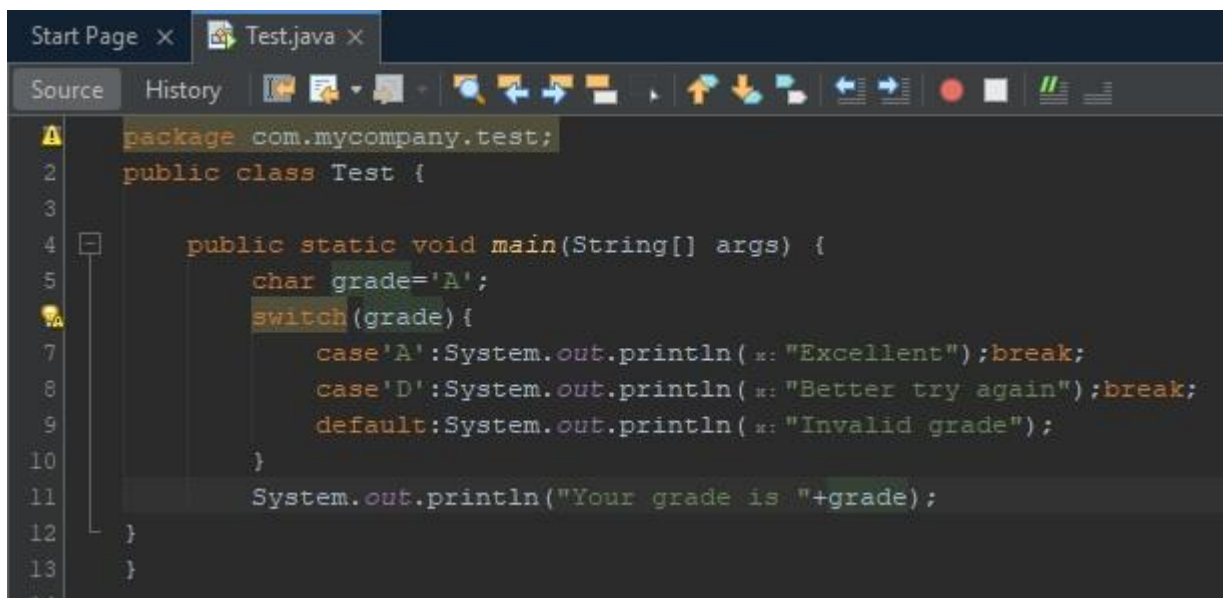
40

50

I'm out of the Loop now
-----
BUILD SUCCESS
-----

```

5.



```

package com.mycompany.test;

public class Test {

    public static void main(String[] args) {
        char grade='A';
        switch (grade) {
            case 'A': System.out.println("Excellent"); break;
            case 'D': System.out.println("Better try again"); break;
            default: System.out.println("Invalid grade");
        }
        System.out.println("Your grade is "+grade);
    }
}

```

```

-----< com.mycompany:Test >-----
Building Test 1.0-SNAPSHOT
-----[ jar ]-----

--- exec-maven-plugin:3.0.0:exec (default-cli) @ Test ---
Excellent
Your grade is A
-----
BUILD SUCCESS
-----

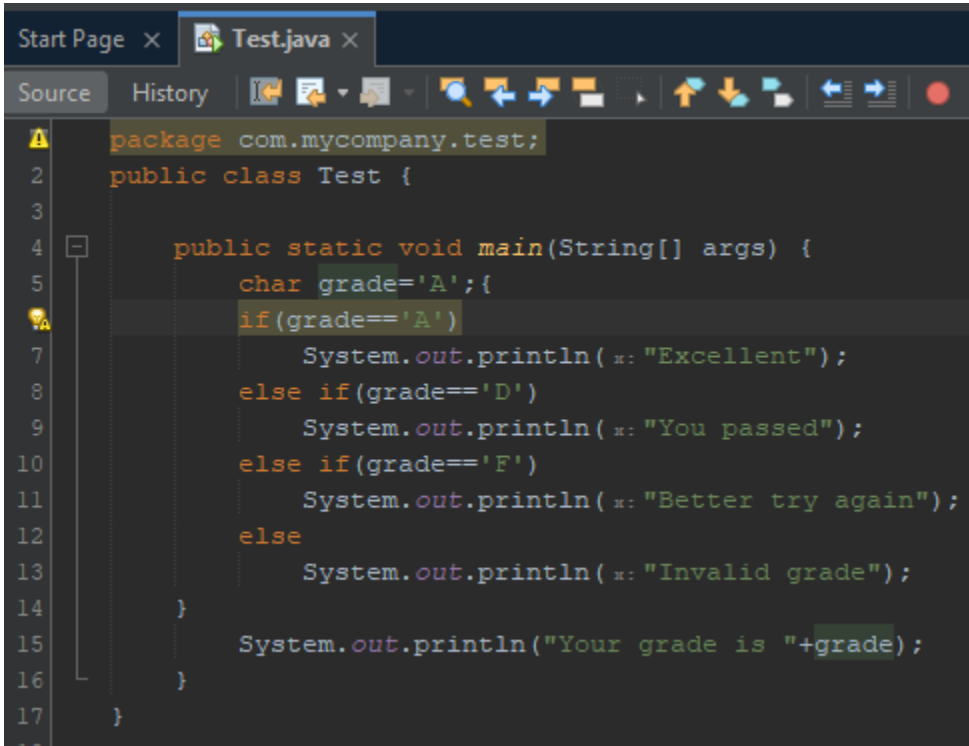
```

```
-----< com.mycompany:Test >-----
Building Test 1.0-SNAPSHOT
-----[ jar ]-----

--- exec-maven-plugin:3.0.0:exec (default-cli) @ Test ---
Excellent
Better try again
Your grade is A

BUILD SUCCESS
```

If-Else statement



The screenshot shows an IDE window titled 'Test.java'. The code defines a public class 'Test' with a main method. Inside the main method, a character variable 'grade' is initialized to 'A'. An if-else statement follows, checking the value of 'grade'. If it is 'A', it prints 'Excellent'. If it is 'D', it prints 'You passed'. If it is 'F', it prints 'Better try again'. For any other value, it prints 'Invalid grade'. Finally, it prints 'Your grade is ' followed by the value of 'grade'.

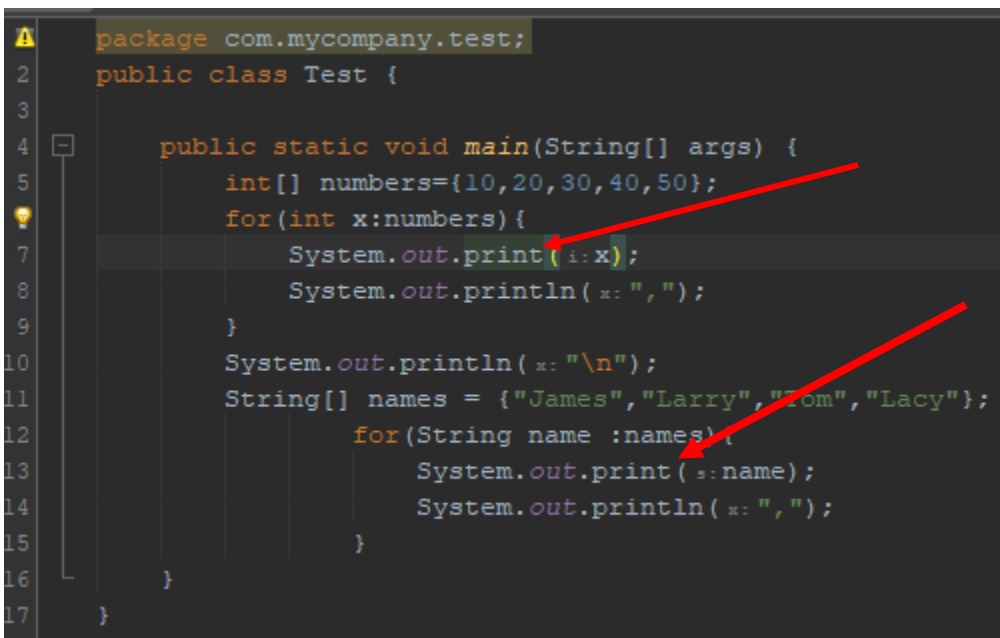
```
package com.mycompany.test;

public class Test {

    public static void main(String[] args) {
        char grade='A';
        if(grade=='A')
            System.out.println("Excellent");
        else if(grade=='D')
            System.out.println("You passed");
        else if(grade=='F')
            System.out.println("Better try again");
        else
            System.out.println("Invalid grade");
    }

    System.out.println("Your grade is "+grade);
}
```

6.



The screenshot shows the same IDE window with the 'Test.java' file. The code now includes two for loops. The first loop iterates over an array of integers named 'numbers' and prints each element. The second loop iterates over an array of strings named 'names' and prints each element. Two red arrows point to the loop variables 'x' and 'name' in the for loops.

```
package com.mycompany.test;

public class Test {

    public static void main(String[] args) {
        int[] numbers={10,20,30,40,50};
        for(int x:numbers){
            System.out.print(x);
            System.out.println(" , ");
        }
        System.out.println(" \n");
        String[] names = {"James","Larry","Tom","Lacy"};
        for(String name :names){
            System.out.print(name);
            System.out.println(" , ");
        }
    }
}
```

```
] Building Test 1.0-SNAPSHOT
-----[ jar ]-----

--- exec-maven-plugin:3.0.0:exec (default-cli) @ Test ---
10,
20,
30,
40,
50,

James,
Larry,
Tom,
Lacy,
-----
BUILD SUCCESS
-----
```