

Practical 01

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Questions-

1. Write your first java programme to display "Hello World" on the screen.
2. Write a programme to display your name on the first line and to display your degree programme on the second line on the screen. Please use command line (cmd) to execute your code.
3. Write down a programme to get the following output using a for loop. Repeat the same example by using a while loop.

Executing Loop 0

Executing Loop 1

Executing Loop 2

Executing Loop 3

Executing Loop 4

4. Write a class and insert the following code block into the appropriate place. Execute the code and get the result.

"

```
int [] numbers = {10, 20, 30, 40, 50};
```

```
for(int x : numbers ){
```

```
    if( x == 30 ){
```

```
        break;
```

```
    }
```

```
    System.out.print( x );
```

```
    System.out.print("\n");
```

```
}
```

```
    System.out.print("I'm out of the Loop now");
```

"

Results:

Repeat the same code using “continue” instead of “break”. Write down the output.

Results:

5. Write a class and insert the following code block into the appropriate place. Execute the code and get the result.

```
1. char grade ='A';
2. switch(grade)
3. {
4. case 'A' :
5. System.out.println("Excellent!");
6. break;
7. case 'D' :
8. System.out.println("You passed");
9. case 'F' :
10. System.out.println("Better try again");
11. break;
12. default :
13. System.out.println("Invalid grade");
14. }
15. System.out.println("Your grade is " + grade);
```

Results:

Repeat the same removing “break” command at line number 6. Write down the output.

Repeat the same scenario by using if-else-if statement instead of switch case.

6. As of java 5 the enhanced for loop was introduced. This is mainly used for Arrays. Below code contains few mistakes. First execute the code. Then identify the errors printed on the console. Rectify all the errors and execute to get the output:

```
class TestEnhanceForLoop {
    public static void mains(String args[]){
        int [] numbers = {10, 20, 30, 40, 50};
        for(int x : numbers ){
            System.out.print( x );
            System.out.print(",")
        }
    }
}
```

```
System.out.print("\n");

String [] names ={"James", "Larry", "Tom", "Lacy"}

    for( String name : names ) {

        System.out.print( name );

        System.out.print(",");
```

Output:

Answers-

01)

```
package com.mycompany.helloworld;

public class Helloworld
{

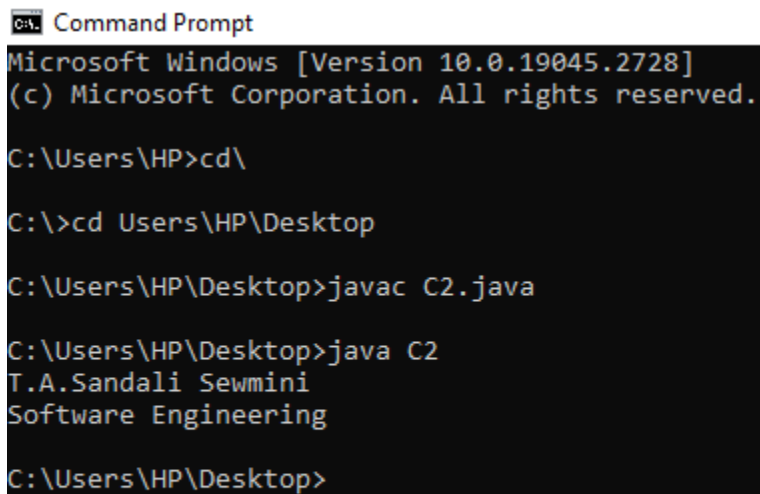
    public static void main(String[] args)
    {
        System.out.println("Hello World!");
    }
}
```

02)

```
public class C2 {

    public static void main(String[] args) {
```

```
        System.out.println("T.A.Sandali Sewmini");  
        System.out.println("Software Engineering");  
    }  
}
```



The screenshot shows a Windows Command Prompt window with the following text:

```
Command Prompt  
Microsoft Windows [Version 10.0.19045.2728]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\HP>cd\  
  
C:\>cd Users\HP\Desktop  
  
C:\Users\HP\Desktop>javac C2.java  
  
C:\Users\HP\Desktop>java C2  
T.A.Sandali Sewmini  
Software Engineering  
  
C:\Users\HP\Desktop>
```

03)FOR LOOP

```
package com.mycompany.forloop;  
  
public class Forloop  
{  
  
    public static void main(String[] args)
```

```
{  
    int i;  
    for(i=0;i<5;i++)  
        System.out.println("Executing Loop"+i);  
}  
}
```

While Loop

```
package com.mycompany.whileloop;  
  
public class Whileloop  
{  
  
    public static void main(String[] args)  
    {  
        int i=0;  
        while(i<5)  
        {  
            System.out.println("Executing Loop"+i);  
            i++;  
        }  
    }  
}
```

04)

```
package com.mycompany.qestion;
```

```
public class Qestion {
```

```
    public static void main(String[] args) {
```

```
        int [] numbers = {10, 20, 30, 40, 50};
```

```
        for(int x : numbers )
```

```
        {
```

```
            if( x == 30 )
```

```
            {
```

```
                break;
```

```
            }
```

```
            System.out.print( x );
```

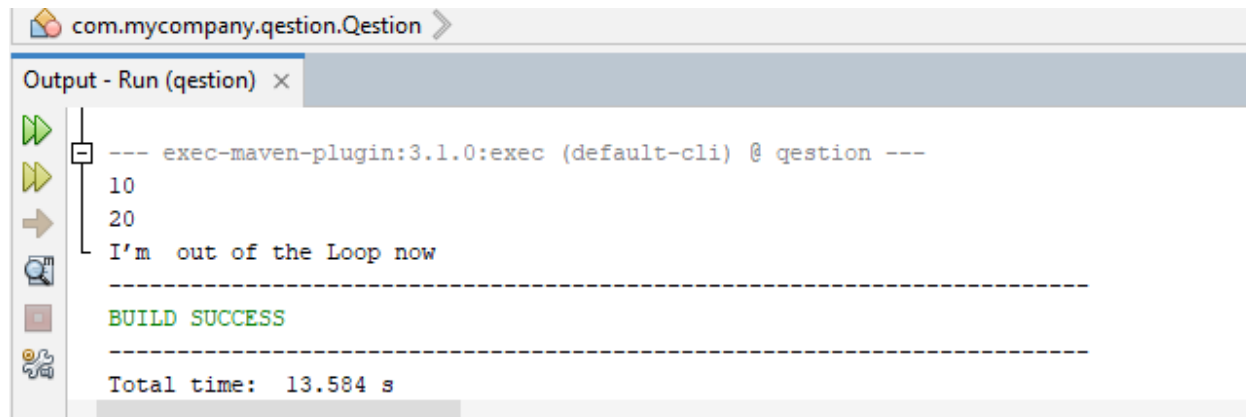
```
            System.out.print("\n");
```

```
        }
```

```
        System.out.print("I'm out of the Loop now");
```

```
    }
```

```
}
```



```
com.mycompany.qestion.Question >  
Output - Run (qestion) x  
--- exec-maven-plugin:3.1.0:exec (default-cli) @ qestion ---  
10  
20  
I'm out of the Loop now  
-----  
BUILD SUCCESS  
-----  
Total time: 13.584 s
```

- Using continue

```
package com.mycompany.qestion;
```

```
public class Qestion {
```

```
    public static void main(String[] args) {  
        int [] numbers = {10, 20, 30, 40, 50};  
        for(int x : numbers )  
        {  
            if( x == 30 )  
            {  
                continue;  
            }  
            System.out.print( x );  
            System.out.print("\n");  
        }  
    }  
}
```

```

    }

    System.out.print("I'm out of the Loop now");

}

}

```

```

com.mycompany.qestion.Question > main > for (int x : numbers) > if (x == 30) >
Output - Run (qestion) x
--- exec-maven-plugin:3.1.0:exec (default-cli) @ qestion ---
10
20
40
50
I'm out of the Loop now
-----
BUILD SUCCESS

```

05)

```

package com.mycompany.qestion;

public class Qestion
{

    public static void main(String[] args)
    {

        char grade ='A';
        switch(grade)
        {
            case 'A' :

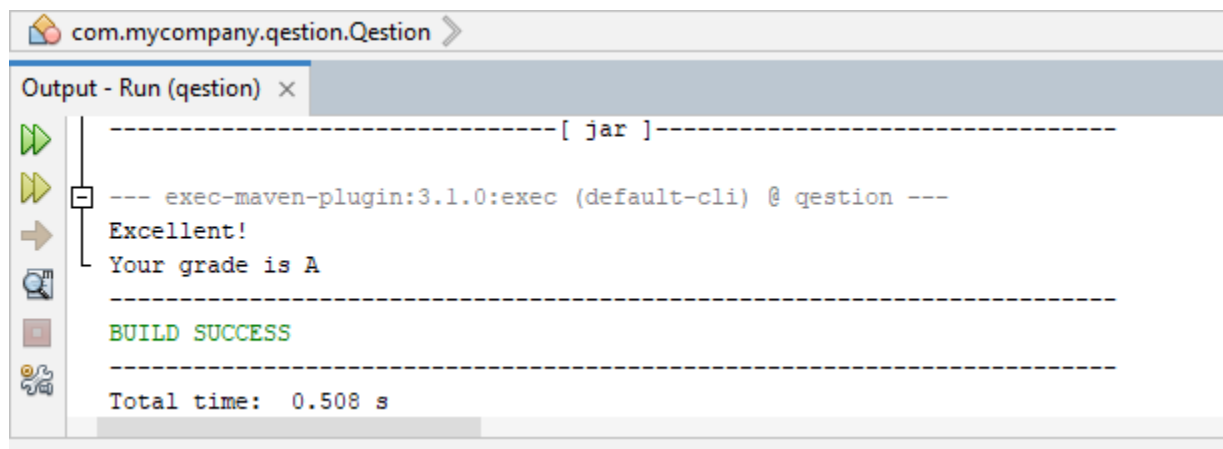
```



```

        System.out.println("Excellent!");
        break;
        case 'D' :
            System.out.println("You passed");
        case 'F' :
            System.out.println("Better try again");
            break;
        default :
            System.out.println("Invalid grade");
    }
    System.out.println("Your grade is " + grade);
}
}

```



```

com.mycompany.qestion.Question >
Output - Run (qestion) x
-----[ jar ]-----
--- exec-maven-plugin:3.1.0:exec (default-cli) @ qestion ---
Excellent!
Your grade is A
-----
BUILD SUCCESS
-----
Total time: 0.508 s

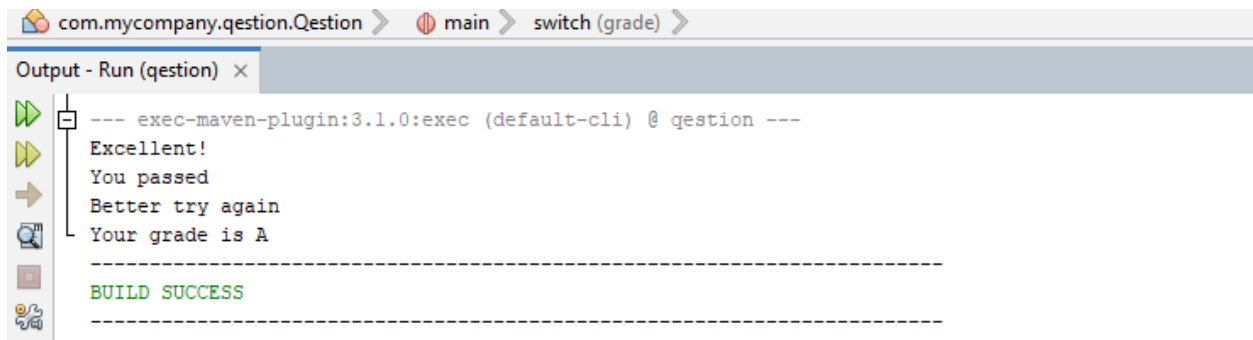
```

- Removing “break” command at line number 6
package com.mycompany.qestion;

```
public class Qestion
{

    public static void main(String[] args)
    {
        char grade ='A';
        switch(grade)
        {
            case 'A' :
                System.out.println("Excellent!");

            case 'D' :
                System.out.println("You passed");
            case 'F' :
                System.out.println("Better try again");
                break;
            default :
                System.out.println("Invalid grade");
        }
        System.out.println("Your grade is " + grade);
    }
}
```



```
com.mycompany.qestion.Question > main > switch (grade) >
Output - Run (qestion) x
--- exec-maven-plugin:3.1.0:exec (default-cli) @ qestion ---
Excellent!
You passed
Better try again
Your grade is A
-----
BUILD SUCCESS
-----
```

Using if-else-if

```
package com.mycompany.qestion;

public class Qestion
{

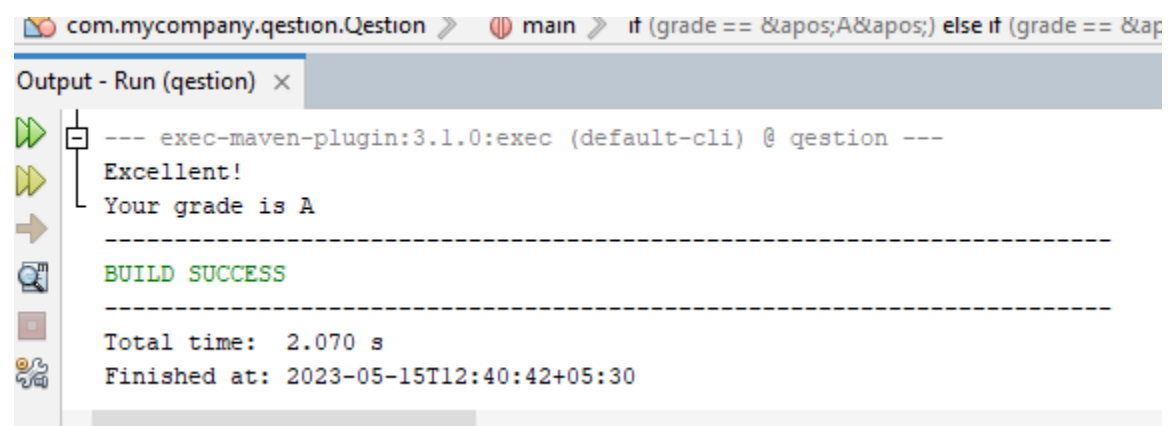
    public static void main(String[] args)
    {
        char grade ='A';

        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);
}
}

```



com.mycompany.qestion.Qestion > main > if (grade == "A"); else if (grade == "F");

Output - Run (qestion) ×

```

--- exec-maven-plugin:3.1.0:exec (default-cli) @ qestion ---
Excellent!
Your grade is A
-----
BUILD SUCCESS
-----
Total time: 2.070 s
Finished at: 2023-05-15T12:40:42+05:30

```

06)

```
package com.mycompany.testenhanceforloop;

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

Output



The screenshot shows an IDE output window titled "com.mycompany.testenhanceforloop.TestEnhanceForLoop". The output content is as follows:

```
--- exec-maven-plugin:3.1.0:exec (default-cli) @ TestEnhanceForLoop ---
10,20,30,40,50,
James,Larry,Tom,Lacy,
-----
BUILD SUCCESS
-----
Total time: 8.434 s
Finished at: 2023-05-15T17:25:58+05:30
```

On the left side of the output window, there is a vertical toolbar with icons for running, stepping through, and other debugging actions.