

Implement a program using basic programming constructs like Branching and Looping

1) While loop:-

```
class Whileloop
{
    public static void main(String arg[])
    {
int a=0;
        while(a<=100)
        {
            if(a%5==0)
            {
                System.out.println(a);
            } a++;
        }
    }
}
```

Output :

0

5

10

15

20

25

30

35

40

45

50

55

60

65

70

75

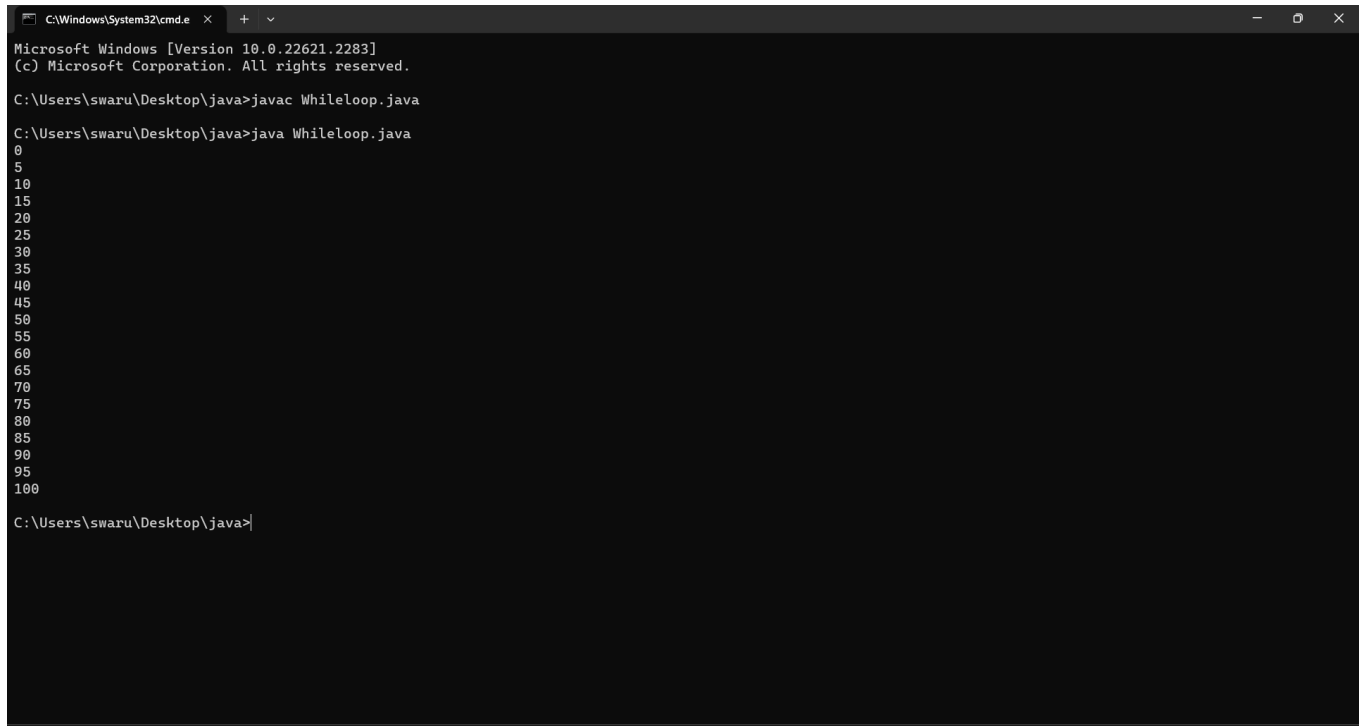
80

85

90

95

100



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.2283]
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C:\Users\swaru\Desktop\java>javac Whileloop.java

C:\Users\swaru\Desktop\java>java Whileloop.java
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100

C:\Users\swaru\Desktop\java>
```

2) For loop:-

class Forloop

```
{  
    public static void main(String arg[])  
    {  
        int a;  
        for(a=0;a<=100;a++)  
        {  
            if(a%20==0)  
            {  
                System.out.println(a);  
            }  
        }  
    }  
}
```

Output :

0

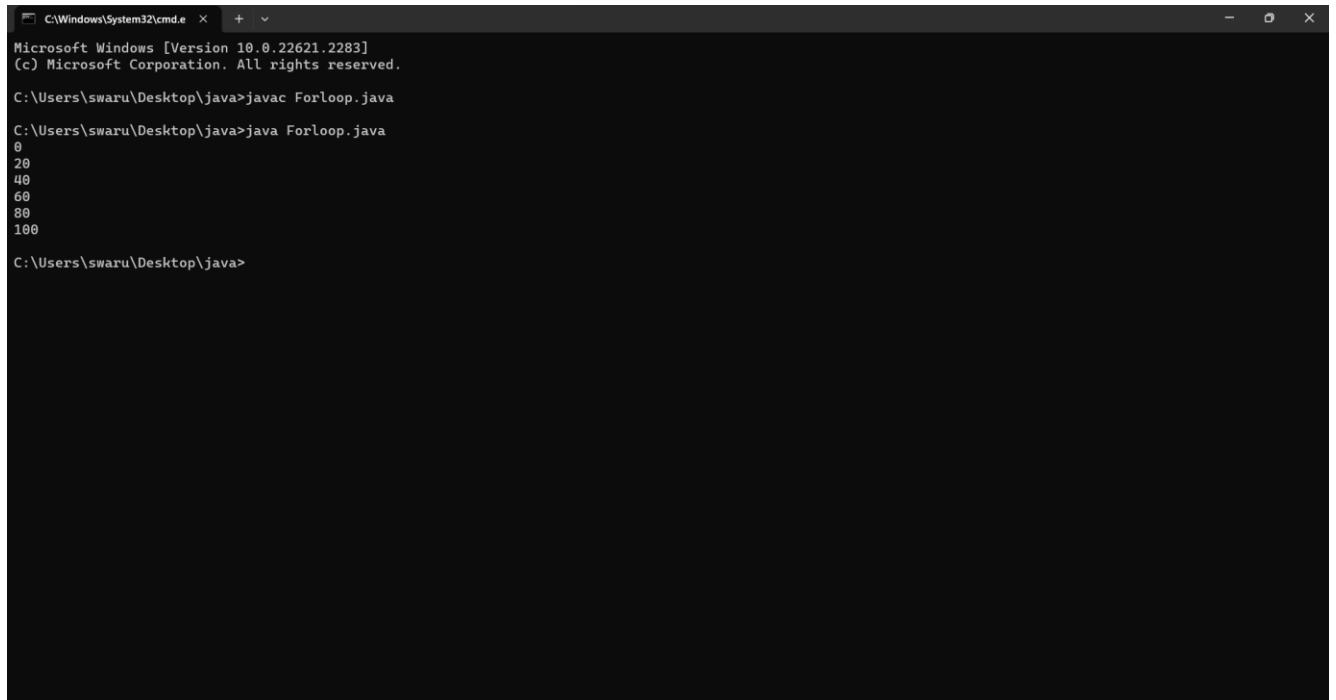
20

40

60

80

100



```
C:\Windows\System32\cmd.exe
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C:\Users\swaru\Desktop\java>javac Forloop.java

C:\Users\swaru\Desktop\java>java Forloop.java
0
20
40
60
80
100

C:\Users\swaru\Desktop\java>
```

3) Dowhile loop:-

class Dowhileloop

```
{  
    public static void main(String arg[])  
    {  
int a=0;  
    do  
    {  
        if(a%10==0)  
        {  
            System.out.println(a);  
            } a++;  
    } while(a<=100);  
    }  
}
```

Output :

0

10

20

30

40

50

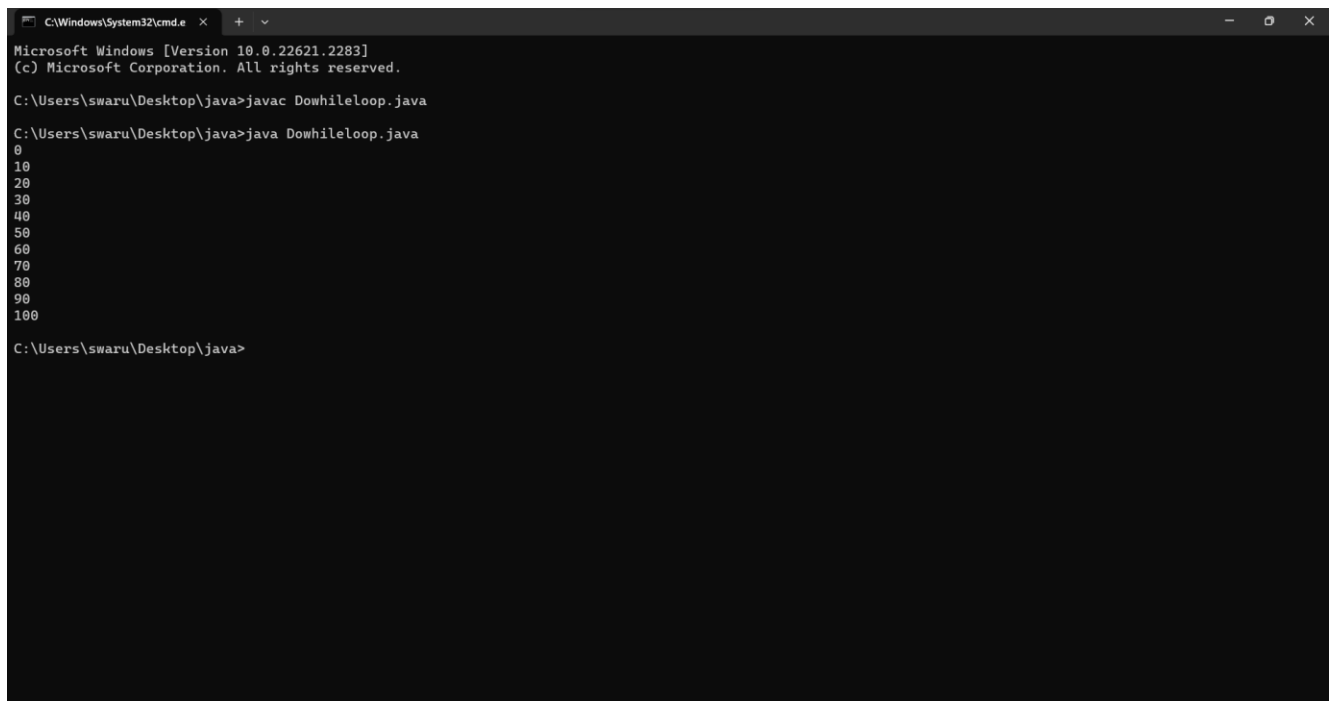
60

70

80

90

100



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.2283]
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C:\Users\swaru\Desktop\java>javac Dowhileloop.java

C:\Users\swaru\Desktop\java>java Dowhileloop.java
100
90
80
70
60
50
40
30
20
10
0

C:\Users\swaru\Desktop\java>
```

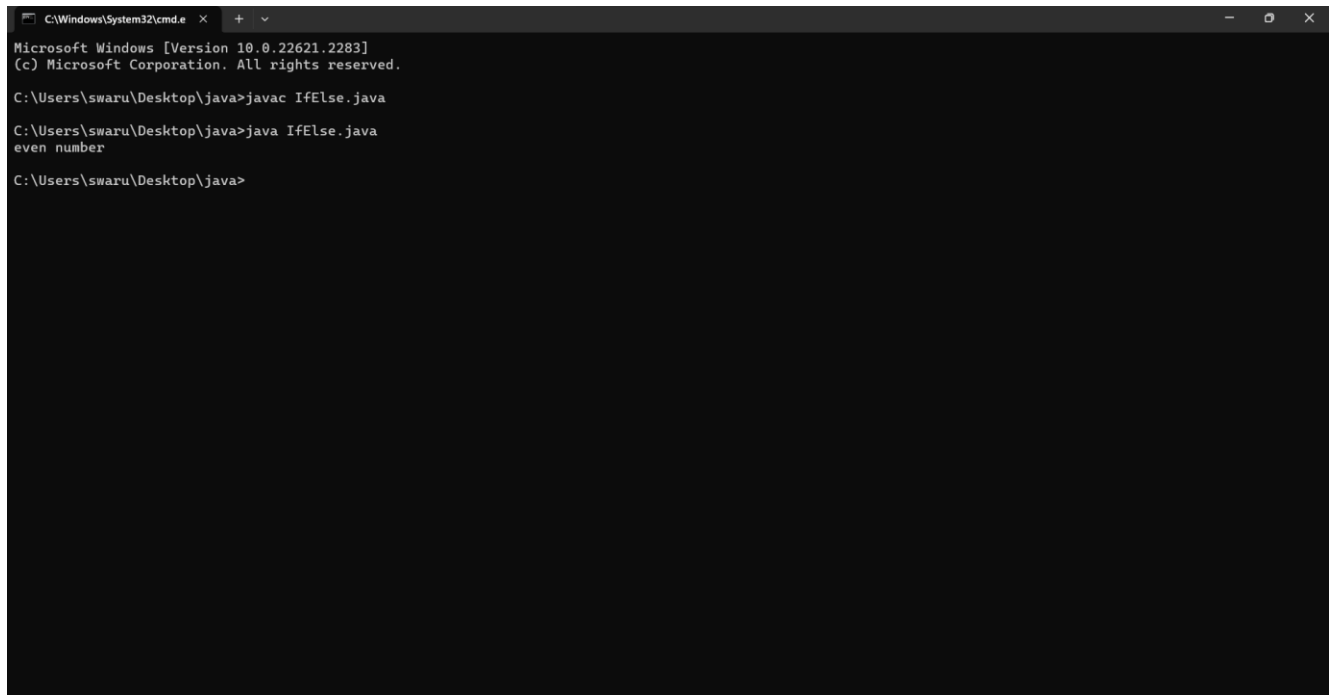
4)if else :-

```
public class IfElseExample {
```

```
public static void main(String[] args) {  
    int number=10;  
    if(number%2==0){  
        System.out.println("even number");  
    }else{  
        System.out.println("odd number");  
    }  
}  
  
}
```

Output:

even number



```
C:\Windows\System32\cmd.e  x  +  v  
Microsoft Windows [Version 10.0.22621.2283]  
(c) Microsoft Corporation. All rights reserved.  
C:\Users\swaru\Desktop\java>javac IfElse.java  
C:\Users\swaru\Desktop\java>java IfElse.java  
even number  
C:\Users\swaru\Desktop\java>
```


5) Ladder if else:-

```
class SecJavaProgram
{
    public static void main(String args[])
    {
        int a=95;

        if(a>=90)
        {
            System.out.println("grade A");
        }
        else if(a>=80)
        {
            System.out.println("grade B");
        }
        else if(a>=70)
```

```
{  
System.out.println("grade c");  
}  
else if(a<70)  
{  
System.out.println("grade F");  
}  
}  
}
```

Output :

grade A

```
C:\Windows\System32\cmd.e  X + v
Microsoft Windows [Version 10.0.22621.2283]
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C:\Users\swaru\Desktop\java>javac SecJavaProgram.java

C:\Users\swaru\Desktop\java>java SecJavaProgram.java
grade A

C:\Users\swaru\Desktop\java>|
```

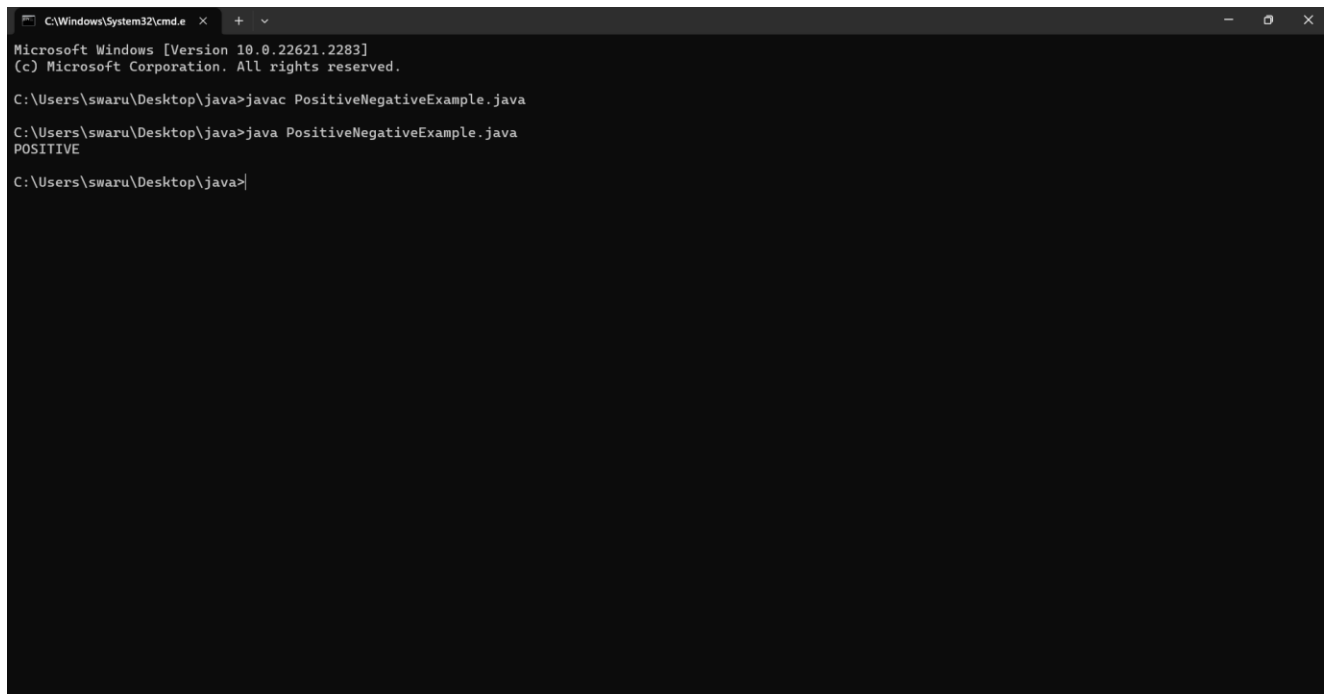
6) nested if else:-

```
public class PositiveNegativeExample {
    public static void main(String[] args) {
        int number=5;
        if(number>0){
            System.out.println("POSITIVE");
        }else if(number<0){
            System.out.println("NEGATIVE");
        }
    }
}
```

```
    }else{  
        System.out.println("ZERO");  
    }  
}  
}
```

Output :

POSITIVE



```
C:\Windows\System32\cmd.exe  
Microsoft Windows [Version 10.0.22621.2283]  
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C:\Users\swaru\Desktop\java>javac PositiveNegativeExample.java  
  
C:\Users\swaru\Desktop\java>java PositiveNegativeExample.java  
POSITIVE  
  
C:\Users\swaru\Desktop\java>
```

7) switch:-

```
class SecJavaProgram
```

```
{  
    public static void main(String args[])  
{  
    int a=7;  
    switch(a)  
{  
case 1:  
    System.out.println("monday");  
    break;  
case 2:  
    System.out.println("tuesday");  
    break;  
case 3:  
    System.out.println("wednesday");  
    break;  
case 4:  
    System.out.println("thursday");  
    break;  
case 5:
```

```
System.out.println("friday");  
break;  
case 6:  
System.out.println("saturday");  
break;  
case 7:  
System.out.println("sunday");  
break;  
default:  
System.out.println("invalid");  
break;  
}  
}  
}
```

Output:

Sunday

```
C:\Windows\System32\cmd.e  x  +  v
Microsoft Windows [Version 10.0.22621.2283]
(c) Microsoft Corporation. All rights reserved.

C:\Users\swaru\Desktop\java>javac WeekDayProgram.java

C:\Users\swaru\Desktop\java>java WeekDayProgram.java
sunday

C:\Users\swaru\Desktop\java>|
```