

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%20==0)
            {
                System.out.println(a);
            } a++;
        }
    }
}
```

Output :

0

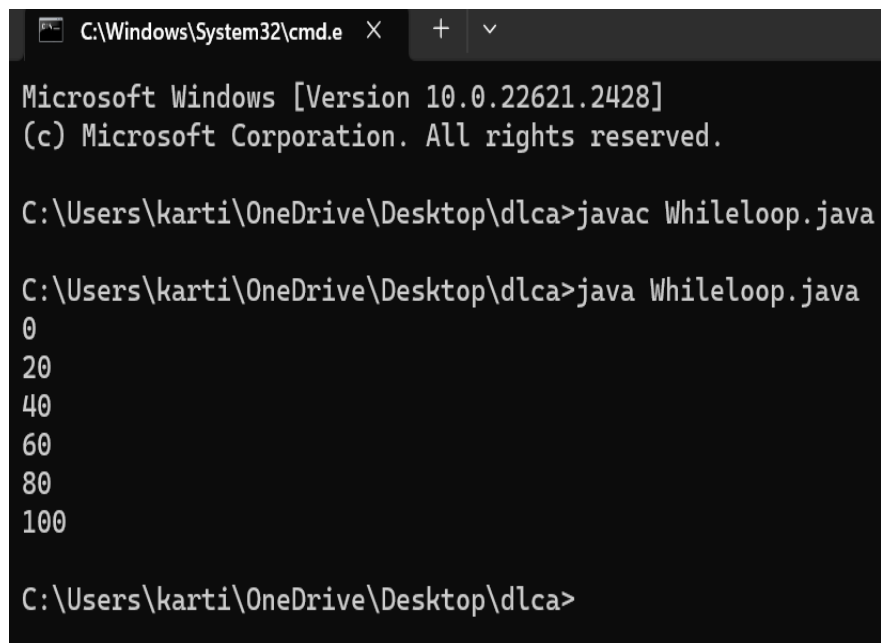
20

40

60

80

100

A screenshot of a Windows command prompt window. The title bar shows 'C:\Windows\System32\cmd.e' with a close button and a dropdown arrow. The window content shows the following text:

```
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\karti\OneDrive\Desktop\dlca>javac Whileloop.java

C:\Users\karti\OneDrive\Desktop\dlca>java Whileloop.java
0
20
40
60
80
100

C:\Users\karti\OneDrive\Desktop\dlca>
```

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.e  X  +  v

Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\karti\OneDrive\Desktop\dlca>javac Forloop.java

C:\Users\karti\OneDrive\Desktop\dlca>java Forloop.java
0
20
40
60
80
100

C:\Users\karti\OneDrive\Desktop\dlca>|
```

3} dowhile loop

class Dowhileloop

{

public static void main(String arg[])

{

int a=0;

do

```
{  
    if(a%20==0)  
    {  
        System.out.println(a);  
        } a++;  
    } while(a<=100);  
}
```

Output :

0

20

40

60

80

100

```
C:\Windows\System32\cmd.e  X  +  v

Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\karti\OneDrive\Desktop\dlca>javac Dowhileloop.java

C:\Users\karti\OneDrive\Desktop\dlca>java Dowhileloop.java
0
20
40
60
80
100

C:\Users\karti\OneDrive\Desktop\dlca>|
```

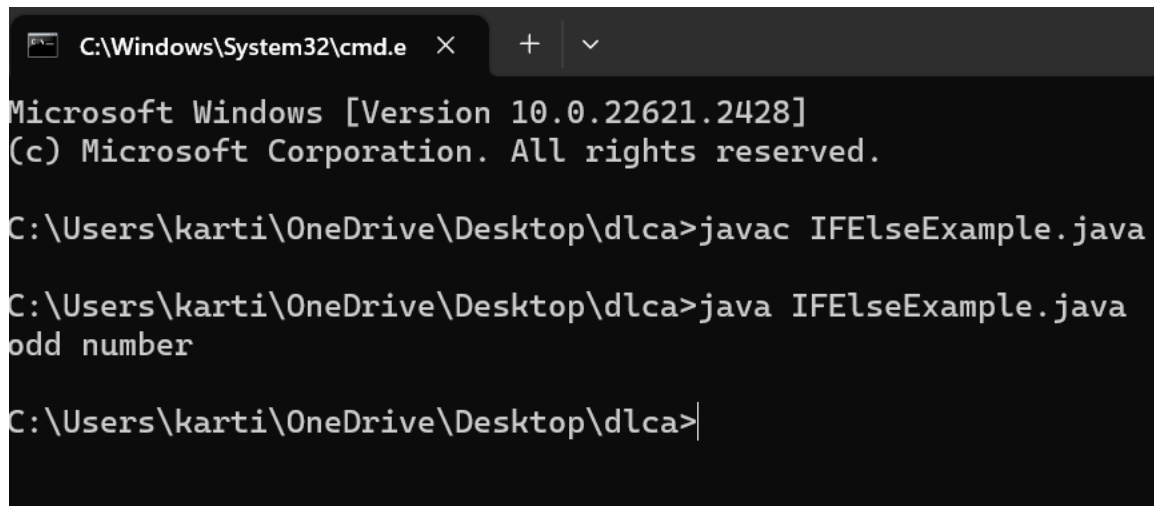
4}if else

```
public class IfElseExample {
    public static void main(String[] args) {
        int number=13;
        if(number%2==0){
            System.out.println("even number");
        }else{
```

```
        System.out.println("odd number");
    }
}
}
```

Output:

odd number



```
C:\Windows\System32\cmd.e  X  +  v
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\karti\OneDrive\Desktop\dlca>javac IFElseExample.java

C:\Users\karti\OneDrive\Desktop\dlca>java IFElseExample.java
odd number

C:\Users\karti\OneDrive\Desktop\dlca>|
```

5} Ladder if else

```
class SecJavaProgram
{
```

```
public static void main(String args[])
{
    int a=90;

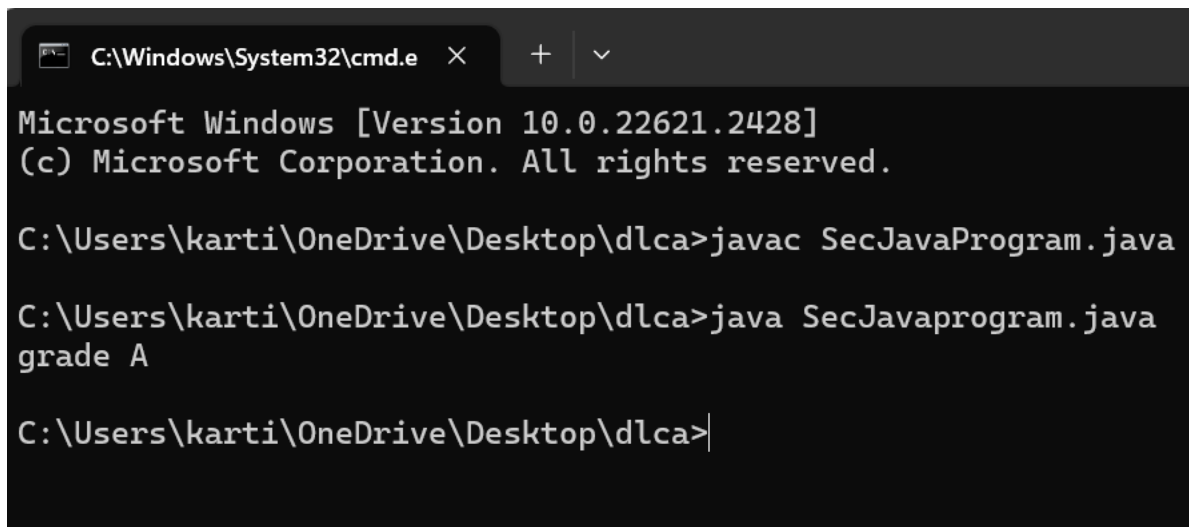
    if(a>=90)
    {
        System.out.println("grade A");
    }
    else if(a>=80)
    {
        System.out.println("grade B");
    }
    else if(a>=70)
    {
        System.out.println("grade c");
    }
    else if(a<70)
    {
        System.out.println("grade F");
    }
}
```



```
}  
}  
}
```

Output :

grade A



```
C:\Windows\System32\cmd.e  X  +  v  
Microsoft Windows [Version 10.0.22621.2428]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\karti\OneDrive\Desktop\dlca>javac SecJavaProgram.java  
  
C:\Users\karti\OneDrive\Desktop\dlca>java SecJavaprogram.java  
grade A  
  
C:\Users\karti\OneDrive\Desktop\dlca>|
```

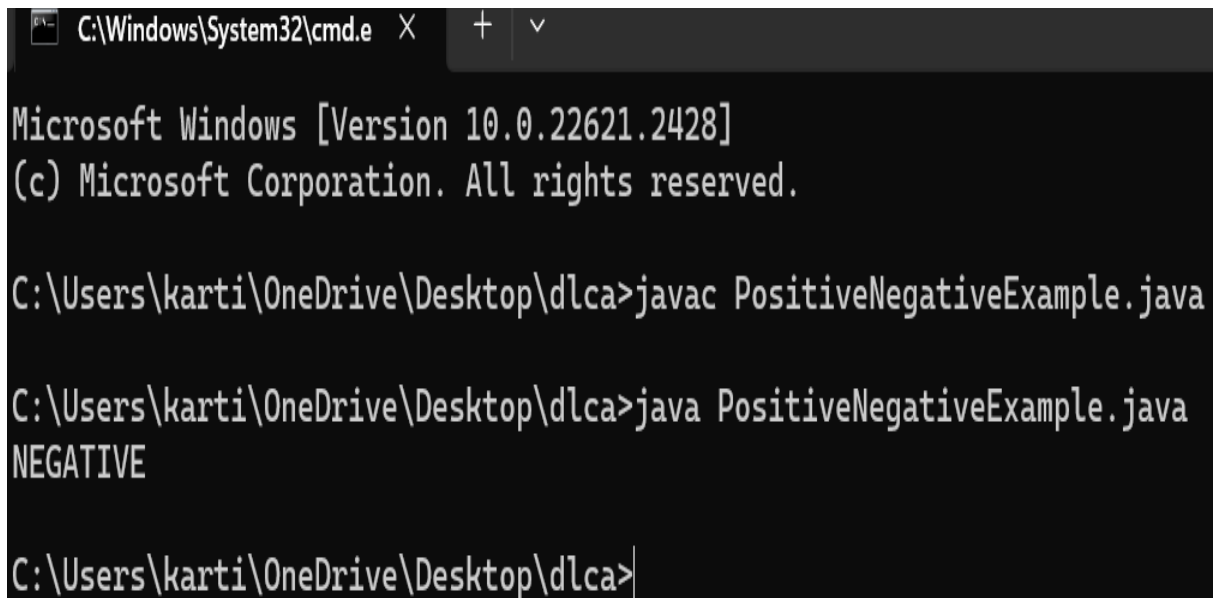
6} nested if else

```
public class PositiveNegativeExample {  
    public static void main(String[] args) {  
        int number=-13;  
        if(number>0){
```

```
        System.out.println("POSITIVE");  
    }else if(number<0){  
        System.out.println("NEGATIVE");  
    }else{  
        System.out.println("ZERO");  
    }  
}  
  
}
```

Output :

NEGATIVE



```
C:\Windows\System32\cmd.e  X  +  v  
Microsoft Windows [Version 10.0.22621.2428]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\karti\OneDrive\Desktop\dlca>javac PositiveNegativeExample.java  
  
C:\Users\karti\OneDrive\Desktop\dlca>java PositiveNegativeExample.java  
NEGATIVE  
  
C:\Users\karti\OneDrive\Desktop\dlca>
```

7} switch

```
class SecJavaProgram
{
    public static void main(String args[])
    {
        int a=6;
        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:

saturday

```
C:\Users\karti\OneDrive\Desktop\dlca>javac SecJavaProgram.java
```

```
C:\Users\karti\OneDrive\Desktop\dlca>java SecJavaProgram.java  
saturday
```

```
C:\Users\karti\OneDrive\Desktop\dlca>|
```