

## 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++;
```

```
    }
```

```
}
```

```
}
```

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

C:\Users\admin\Desktop\s1-14 java>java Whileloop.java
Error: Could not find or load main class Whileloop.java
Caused by: java.lang.ClassNotFoundException: Whileloop.java

C:\Users\admin\Desktop\s1-14 java>java While.java
0
20
40
60
80
100

C:\Users\admin\Desktop\s1-14 java>|
```

## 2} for loop

class Forloop

```
{

    public static void main(String arg[])

    {

        int a;

for(a=0;a<=100;a++)

    {

        if(a%20==0)

        {

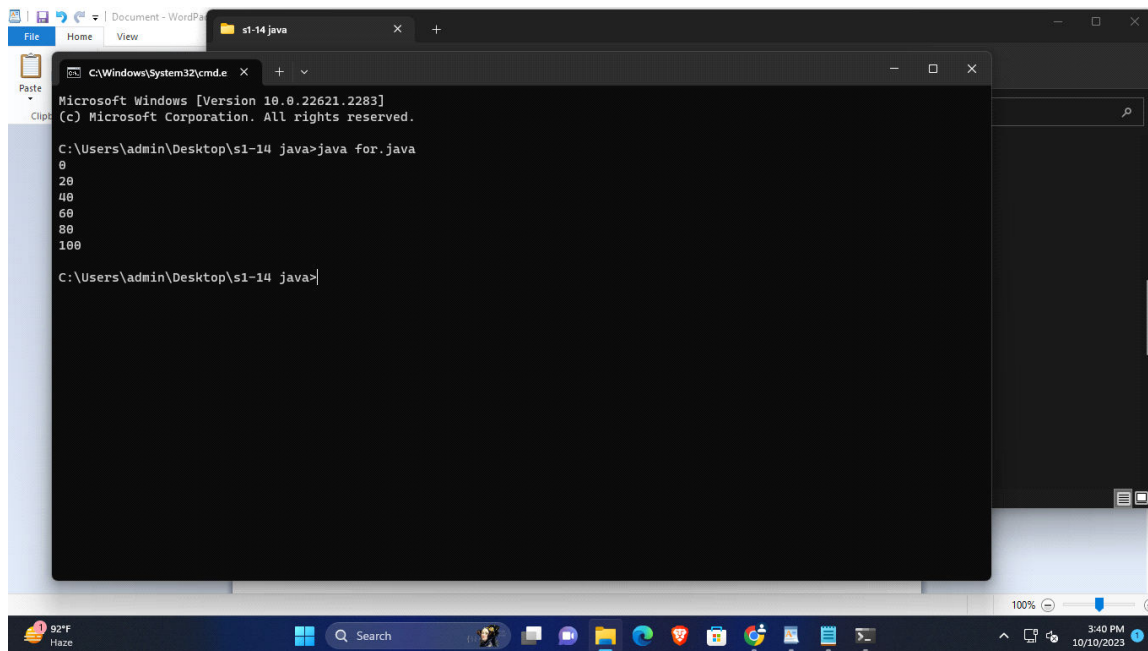
            System.out.println(a);

        }

    }

}

}
```



### 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);  
    }  
}
```

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

C:\Users\admin\Desktop\s1-14 java>java dowhile.java
0
20
40
60
80
100

C:\Users\admin\Desktop\s1-14 java>
```

#### 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");

        }

    }

}
```

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

C:\Users\admin\Desktop\s1-14 java>java ifelse.java
odd number

C:\Users\admin\Desktop\s1-14 java>|
```

## 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");
}
}
}
}

```

```

C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.2283]
(c) Microsoft Corporation. All rights reserved.

C:\Users\admin\Desktop\s1-14 java>java 4program.java
grade A

C:\Users\admin\Desktop\s1-14 java>

```

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{

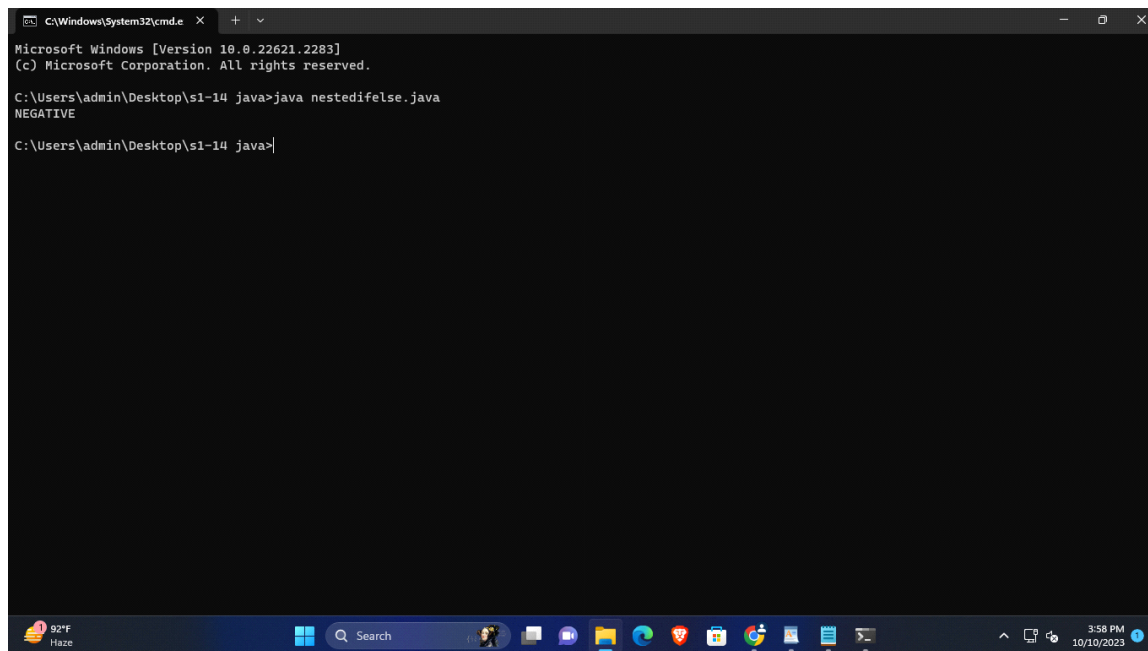
    System.out.println("ZERO");

    }

}

}

```



The screenshot shows a Windows command prompt window titled "C:\Windows\System32\cmd.exe". The window displays the following text:

```

Microsoft Windows [Version 10.0.22621.2283]
(c) Microsoft Corporation. All rights reserved.

C:\Users\admin\Desktop\sl-14 java>java nestedifelse.java
NEGATIVE

C:\Users\admin\Desktop\sl-14 java>|

```

The taskbar at the bottom shows the system clock as 3:58 PM on 10/10/2023, and the weather as 92°F Haze.

## 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;
```

```
}
```

```
}
```

```
}
```

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

C:\Users\admin\Desktop\s1-14 java>java 5program.java
saturday

C:\Users\admin\Desktop\s1-14 java>
```

92°F  
Haze

Search

3:59 PM  
10/10/2023