Implement a program using basic programming constructs like Branching and Looping

1} while loop

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

```
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C:\Users\Vedika\Desktop\S3-46>javac  Whileloop.java

C:\Users\Vedika\Desktop\S3-46>java  Whileloop.java
0
20
40
60
80
100
```

Output :

0

20

40

60

80

100

2} for loop

class Forloop

{
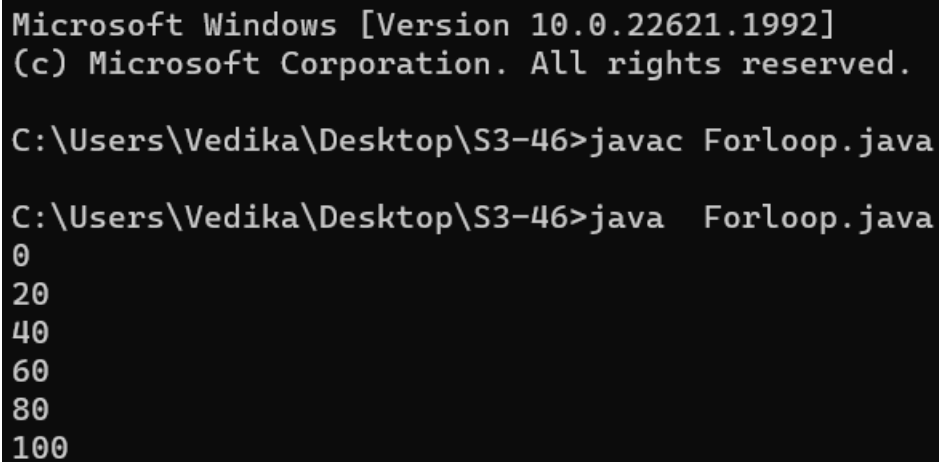
  public static void main(String arg[])

   {

       int a;

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

```
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C:\Users\Vedika\Desktop\S3-46>javac Forloop.java

C:\Users\Vedika\Desktop\S3-46>java  Forloop.java
0
20
40
60
80
100
```

Output :

0

20

40

60

80

100

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);
  }
}
```

```
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C:\Users\Vedika\Desktop\S3-46>javac Dowhileloop.java

C:\Users\Vedika\Desktop\S3-46>java  Dowhileloop.java
0
20
40
60
80
100
```

Output :

0

20

40

60

80

100

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");

    }

}

}
```



```
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C:\Users\Vedika\Desktop\S3-46>javac IfElseExample.java

C:\Users\Vedika\Desktop\S3-46>java IfElseExample.java
odd number
```

Output:

odd number

5} Ladder if else

class SecJavaProgram

{

 public static void main(String args[])

{

  int a=90;

if(a>=90)

{
```

```java
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");

}

}

}
```

```
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C:\Users\Vedika\Desktop\S3-46>javac SecJavaProgram.java

C:\Users\Vedika\Desktop\S3-46>java SecJavaProgram.java
grade A
```

Output :

grade A

6} nested if else

```java
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

7} switch

```java
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;
```

```java
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;
}
}
}
```

```
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C:\Users\Vedika\Desktop\S3-46>javac Switch.java

C:\Users\Vedika\Desktop\S3-46>java Switch.java
saturday
```

Output:

saturday