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++;
   }
   }
}
```

```
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C:\Users\Vedika\Desktop\S3-45>javac Whileloop.java

C:\Users\Vedika\Desktop\S3-45>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;
for(a=0;a<=100;a++)
```

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

```
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C:\Users\Vedika\Desktop\S3-45>javac  Forloop.java

C:\Users\Vedika\Desktop\S3-45>java  Forloop.java
0
20
40
60
80
100
```

Output :

0

20

40

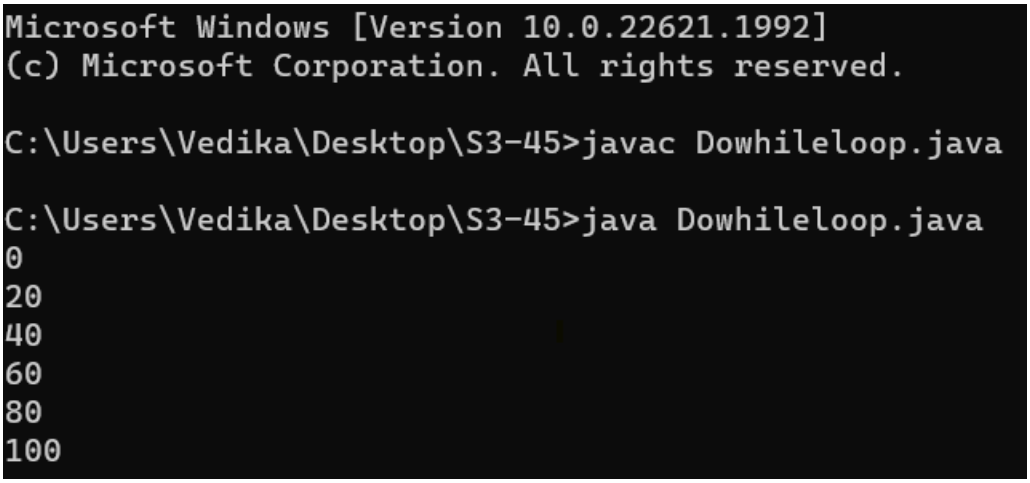
60

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);
  }
}
```



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\S3-45>javac IfElseExample.java

C:\Users\Vedika\Desktop\S3-45>java IfElseExample.java
odd number
```

Output:

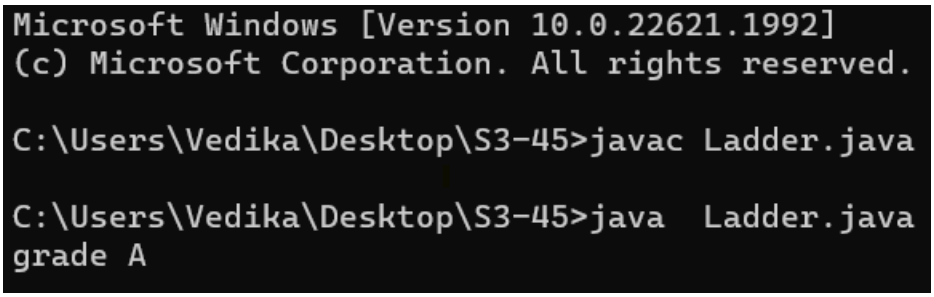
odd number

5} Ladder if else

```
class Ladder
{
  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

6} nested if else

```
public class NestedIfElse {
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");
    }
}
}
```

```
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C:\Users\Vedika\Desktop\S3-45>javac  NestedIfElse.java

C:\Users\Vedika\Desktop\S3-45>java  NestedIfElse.java
NEGATIVE
```

Output :

NEGATIVE

7} switch

```
class Switch
{
  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;
}
```

}

}

```
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C:\Users\Vedika\Desktop\S3-45>javac Switch.java

C:\Users\Vedika\Desktop\S3-45>java Switch.java
saturday
```

Output:

saturday