OOP LAB #05

Objective: To gain familiarity with the concept of loops.

Exercise #01: Write a program in java in which print 20 to 30 numbers using for loop.

Source code:

```
package printingnumbers;
public class PrintingNumbers {
public static void main(String[] args) {
int i;
for(i=20;i<=30;i++)    {
System.out.println(i);   }    }    }
```

Output:

```
20
21
22
23
24
25
26
27
28
29
30
```

Exercise #02: Write a program in java and print table of 2 using do while loop.

Source code:

```
package tablebydowhile;
public class TablebyDowhile {
public static void main(String[] args) {
int no=2,i=1;
do
{
System.out.println(no+"*"+i+"="+(no+(i-1)*no));
i++;
}
while(i<=10);
}
}
```

Output:

```
2*1=2
2*2=4
2*3=6
2*4=8
2*5=10
2*6=12
2*7=14
2*8=16
2*9=18
2*10=20
```

Exercise #03: Write a program in java and print * 100 times using while loop.

Source code:
```java
package print.stearric.by.pkgwhile.loop;
public class PrintStearricByWhileLoop {
public static void main(String[] args) {
int i=1;
while(i<=100)
{
System.out.print("*");
i++;
}
}
}
```

Output:
```
********************************************************************************
**********************
```

Exercise #04: Write a program to print even number from 0 to 50 using for loop.

Source code:

// 1st method
```java
package printevenzerotofifty;
public class PrintEvenZerotoFifty {
public static void main(String[] args) {
int i;
for(i=0;i<=50;i+=2)   {
System.out.println(i);  }  }  }
```

//2nd method
```java
package printevenzerotofifty;
public class PrintEvenZerotoFifty {
public static void main(String[] args) {
int i;
for(i=0;i<=50;i++)   {
if(i%2==0) {
System.out.println(i);  }  }  }  }
```

Output:

0	30
2	32
4	34
6	36
8	38
10	40
12	42
14	44
16	46
18	48
20	50
22	
24	
26	
28	

Exercise #05: Write a program to print odd number from 1 to 100 using all three loops

Source code:

// **By using For loop**

```
package printoddonetohundred;
public class PrintOddonetoHundred {
public static void main(String[] args) {
int i;
for(i=1;i<=100;i++)
{
if(i%2!=0)
{
System.out.print(i+"\t");
}
}
}
}
```

// **By using While loop**

```
package printoddonetohundred;
public class PrintOddonetoHundred {
public static void main(String[] args) {
int i=1;
while(i<=100)
{
System.out.print(i+"\t");
i+=2;
}
}
}
```

// **By using do While loop**

```
package printoddonetohundred;
public class PrintOddonetoHundred {
public static void main(String[] args) {
int i=1;
do
{
System.out.print (i+"\t");
i+=2;
}
while(i<=100);
}
}
```

Output:

1	3	5	7	9	11	13	15	17	19	21	23	25	27
29	31	33	35	37	39	41	43	45	47	49	51	53	55
57	59	61	63	65	67	69	71	73	75	77	79	81	83
85	87	89	91	93	95	97	99						