Java Lab Program

1. Write program to show the greater number using if else statement a=98 and b=23.

public class **GreaterNumber** {

public static void main(String[] args) {

int a = 98, b = 23;

if (a > b) {

System.out.println("a > b");

} else {

System.out.println("b > a");

}

}

}

Output

a > b

2. Write a program to print number 1 to 20 using while loop

public class **WhileLoopDemo** {

public static void main(String[] args) {

int count = 1;

System.out.println("Printing Numbers from 1 to 10");

while (count <= 10) {

System.out.println(count++);

}

}

}

Output

Printing Numbers from 1 to 10

12345678910…20

3. Write a program to print number 1 to 20 using Do while loop

```
public class DoWhileLoopDemo {
public static void main(String[] args) {
int count = 1;
System.out.println("Printing Numbers from 1 to 10");
do { System.out.println(count++);
} while (count <= 10);
}
}
```

Output

Printing Numbers from 1 to 10

12345678….20

4. Write a program to print Even Numbers between 1 to 20 using for loop.

```
public class OddNumber {
public static void main(String[] args) {
 System.out.println("Odd Numbers");
for (int i = 1; i <= 20; ++i) {
if (i % 2 == 0)
System.out.println(i + "\t");
}
}
}
```

Output

Odd Numbers

1 3 5 7 9 11 13 15 17 19

5. Write a program to print Odd Numbers between 1 to 20 using continue statement and for loop.

public class **OddNumber** {

public static void main(String[] args) {

 System.out.println("Odd Numbers");

for (int i = 1; i <= 20; ++i) {

if (i % 2 == 0)

continue;

// Rest of loop body skipped when i is even

System.out.println(i + "\t");

}

}

}

Output

Odd Numbers

1 3 5 7 9 11 13 15 17 19

6. Write a program to generate Fibonacci sequence controlled by a do-while loop

 public class **Fibonacci**{

  public static void main(String args[]) {

   System.out.println("Printing Limited set of Fibonacci Sequence");

   double fib1 = 0;

   double fib2 = 1;

   double temp = 0;

  System.out.println(fib1);

  System.out.println(fib2);

  do {

   temp = fib1 + fib2;

```
System.out.println(temp);

    fib1 = fib2; //Replace 2nd with first number

    fib2 = temp; //Replace temp number with 2nd number

} while (fib2 < 1000);

}

}
```

7. Use of break statement to print numbers numbers 1 to 10

```
public class BreakExample {

public static void main(String[] args) {

System.out.println("Numbers 1 -10");

for (int i = 1;; ++i) {

if (i == 11)

break;

// Rest of loop body skipped when i is even

System.out.println(i + "\t");

}

}

}
```

Output

Numbers 1 –10

1 2 3 4 5 6 7 8 9 10

8. Write a program to calculate Factorial of a number 5.

```
Public class NumberFactorial {

public static void main(String[] args) {

int number = 5;

int factorial = number;

for(int i =(number -1); i > 1; i--){

factorial = factorial * i;
```

```
}
System.out.println("Factorial of a number is " + factorial);
}
}
```

Output

Factorial of a number is 120

9. Demonstrates conditional execution based on nested if else statement condition to find the greatest of 3 numbers using Switch case statement.

```
Public class SwitchCaseStatementDemo {
public static void main(String[] args) {
int a = 10, b = 20, c = 30;
int status = -1;
if (a > b && a > c) {
status = 1;
} else if (b > c) {
 status = 2;
} else {
status = 3;
}
switch (status) {
case 1:
System.out.println("a is the greatest");
break;
case 2:
System.out.println("b is the greatest");
break;
case 3:
```

```
System.out.println("c is the greatest");

break;

default:

System.out.println("Cannot be determined");

}

}

}
```

Output

c is the greatest

Import the Scanner class:

This shows how take user input using scanner class

10. **Write a program to read user name, age, address and lucky number using scanner class in console and print.**

```
import java.util.Scanner;

class ReadConsole {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter your full name: ");

String name = scanner.nextLine();

System.out.print("Enter your Age: ");

String age = scanner.next();

System.out.print("Enter your weight (kg): ");

double weight = scanner.nextDouble();

System.out.print("Enter your Address: ");

int address = scanner.nextInt();

System.out.println("Hello, " + name + ".");

System.out.println("Your Age is " + age + ".");
```

```java
System.out.println("You weigh is" + weight + " kg.");

System.out.println("Your Address is " + address + ".");

 }

}
```

Output:

Enter your full name: Rana

Enter your Age: 23

Enter your weight (kg): 70.45

Enter Address: 7

Hello, Rana.

Your lucky number is 7.

You weigh is 70.45 kg.

Your Address is: Kathmandu.

11. Write a program to read the input number from console and find the number is odd or even