1. Write a program to print numbers from 1 to 10.

Code:

```
public class PrintNumberFrom1_10 {
  public static void main(String[] args) {
    // TODO Auto-generated method stub
    //Printing numbers from 1 to 10
    int i;
  for(i=1;i<=10;i++)//starting value for i,condition for i , incrementing i
    {
        System.out.println(i);//will print the number from 1 to 10
    }
    }
}

3. Write a program that prompts the user to input a positive integer. It should then print the multiplication table of that number.</pre>
```

2. Write a program to calculate the sum of first 10 natural number.

```
public class SumOfFirstTenNaturalNumbers {
  public static void main(String[] args) {
    // TODO Auto-generated method stub
  int i,total=0;
  for (i=1;i<=10;i++)//startinf value for i, condition for i, increment for i
  {
    total=total+i; //adding the numbers
  }
  System.out.print(total);
  }
}</pre>
```

3. Write a program that prompts the user to input a positive integer. It should then print the multiplication table of that number.

Code:

```
import java.util.Scanner;
public class TableOfEnteredNumber {
public static void main(String[] args) {
// TODO Auto-generated method stub
//Program to find the table of enterd number
int i=0;
int n, num;
Scanner scanner=new Scanner(System.in);
System.out.println("Enter the number for Table: ");
n=scanner.nextInt();
for (i=1;i<=10;i++)</pre>
{
num=n*i; //multiplying the entered number by i
System.out.println(num);
}
}
}
```

4. Write a program to find the factorial value of any number entered through the keyboard.

```
import java.util.Scanner;
public class FactorialOfEnteredNumber {
public static void main(String[] args) {
```

```
// TODO Auto-generated method stub
//Program to find the factorial of entered number
int i;
int num=1;
int n;
Scanner <u>scanner=new Scanner(System.in);</u>
System.out.println("Enter the number to find the Factorial: ");
n=scanner.nextInt();
for(i=1;i<=n;i++)</pre>
{
num=num*i;
}
System.out.println("Factorial of Entered number is: "+num);
}
}
5. Two numbers are entered through the keyboard. Write a program to find the
value of one number raised to the power of another. (Do not use Java built-in
method)
Code:
import java.util.Scanner;
public class PowerOfEnteredNumber {
public static void main(String[] args) {
// TODO Auto-generated method stub
//Find the value of one number raised to the power of another number
int power,base;//initializing variables
int result=1;
Scanner scanner=new Scanner(System.in);
System.out.println("Enter the Base Value: ");
```

```
base=scanner.nextInt();
System.out.println("Enter the exponential value: ");
power=scanner.nextInt();
for(int i=1;i<=power;i++)//condition for loop
{
    result=result*base; //logic for the calculation
}
System.out.println(base+" raised to the "+power+"="+result);
}
</pre>
```

6. Write a program that prompts the user to input an integer and then outputs the number with the digits reversed. For example, if the input is 12345, the output should be 54321.

```
Code:
```

```
import java.util.Scanner;
public class ReverseEnteredNumber {
public static void main(String[] args) {
// TODO Auto-generated method stub
//Program to reverse the number enterd by the user
int num, remainder;
int reverse=0;
Scanner scanner=new Scanner(System.in);
System.out.println("Enter the number which you want to Reverse: ");//Enter the number
for eg.(num=123)
num=scanner.nextInt();
while(num!=0) //the loop will execute utill num is not equal to 0
{
remainder=num%10; //obtain the remainder for eg.(remainder=123%10=3)
reverse=reverse*10+remainder;//reverse=0*10+3-->3
num/=10; //123/10=12
```

```
}
System.out.println("the reversed number is: "+reverse);
}
}
```

7. Write a program that reads a set of integers, and then prints the sum of the even and odd integers.

```
Code:
```

```
import java.util.Scanner;
public class SumOfEvenOdd {
public static void main(String[] args) {
// TODO Auto-generated method stub
//Program to find the sum of even/odd number entered by the user
int n,sumEven=0,sumOdd=0;//initializing required variables
Scanner scanner=new Scanner(System.in);
System.out.println("Enter the number of elements in array: ");
n=scanner.nextInt();
int a[]=new int[n]; //initializing an array
System.out.println("enter the elements of an array: ");
for(int i=0;i<n;i++) //condition for entering values in array according to index</pre>
number
a[i]=scanner.nextInt();//this wil read the values in array enterd by user
for(int i=0;i<n;i++)//condition for finding even / odd</pre>
{
if(a[i]%2==0)
sumEven=sumEven+a[i];
}
```

```
else
{
sumOdd=sumOdd+a[i];
}
}
System.out.println("The sum of even number from array is: "+sumEven);
System.out.println("The sum of odd number from array is: "+sumOdd);
}
}
```

8. Write a program that prompts the user to input a positive integer. It should then output a message indicating whether the number is a prime number.

```
import java.util.Scanner;
public class NumberIsPrimeOrNot {
  public static void main(String[] args) {
    // TODO Auto-generated method stub
    //Program to find the number is prime or not
    int num,count=0;
    Scanner scanner=new Scanner(System.in);
    System.out.println("Enter the number for checking is it primeor not: ");
    num=scanner.nextInt();
    if(num<=1) //first we should check whether entered number is not 1
    {
        System.out.println("Enterd number is not a prime number");
        return;
    }
}</pre>
```

```
for(int i=1;i<=num/2;i++) //condition for checking the number is divisioble or not</pre>
{
if(num%i==0) //if yes then increase count
{
count++;
}
}
//if the value of count increses then the number is not a prime number
if(count>1)
{
System.out.println("This is not a prime number");
}
else
{
System.out.println("This is a prime number");
}
}
}
9. Write a program to calculate HCF of Two given number.
Code:
import java.util.Scanner;
public class HcfOfTwoNumbers {
```

public static void main(String[] args) {

int num1,num2; //initializing the variable

Scanner scanner=new Scanner(System.in);

// TODO Auto-generated method stub

//Finding HCF of two variables

int hcf=0;

```
System.out.println("Enter the first number: ");
num1=scanner.nextInt();
System.out.println("Enter the second number: ");
num2=scanner.nextInt();
for (int i=1;i<=num1||i<=num2;i++) //starting a for loop
{
   if (num1%i==0 && num2%i==0) { //checking the number shuold be devided by both hcf=i; //storing the value
}
}
System.out.println("The HCF of entered number is:"+hcf);
}</pre>
```

10. Write a do-while loop that asks the user to enter two numbers. The numbers should be added and the sum displayed. The loop should ask the user whether he or she wishes to perform the operation again. If so, the loop should repeat; otherwise it should terminate.

```
import java.util.Scanner;
public class DoWhileLoop {
public static void main(String[] args) {
// TODO Auto-generated method stub
int ans=0,a,b,sum;
Scanner scanner=new Scanner(System.in);
do {
        System.out.println("Enter the first number: ");
        a=scanner.nextInt();
        System.out.println("Enter the second number: ");
        b=scanner.nextInt();
```

```
sum=a+b;
      System.out.println("The sum of two numbers is; "+sum);
      System.out.println("Do you want to continue the addition if yes then enter 1
and if no then enter 0 ");
      ans=scanner.nextInt();
 }
while(ans==1);
}
}
11. Write a program to enter the numbers till the user wants and at the end
it should display the count of positive, negative and zeros entered.
Code:
import java.util.Scanner;
public class PositiveNegativeZeros {
public static void main(String[] args) {
// TODO Auto-generated method stub
//program to enter the numbers till the user wants and at the end it should
//display the count of positive, negative and zeros entered
Scanner sc= new Scanner(System.in);
char opt;int num;int pc=0,nc=0,zc=0;
do {
System.out.println("Enter the number");
num =sc.nextInt();
if(num>0)
pc++;
else if(num<0)</pre>
nc++;
else
zc++;
System.out.println("If u want to enter more type y");
```

```
opt=sc.next().charAt(0);
}
while(opt=='y');
System.out.println("the count of positive numbers is "+pc );
System.out.println("the count of negative numbers is "+nc );
System.out.println("the count of zeros numbers is "+zc );
}
}
}
```

12. Write a program to enter the numbers till the user wants and at the end the program should display the largest and smallest numbers entered.

```
import java.util.Scanner;
public class largestSmallestNumber {
public static void main(String[] args) {
// TODO Auto-generated method stub
//Program to enter the numbers till user wants and at the end of
//the program should
//display the largest and smallest number entered.
Scanner sc= new Scanner(System.in);
char opt;int num;int
//bulit in methods are used to find max and min values
largest=Integer.MIN_VALUE, smallest=Integer.MAX_VALUE;
do {
System.out.println("Enter the number");
num =sc.nextInt();
if(num>largest)
largest=num;
else if(num<smallest)</pre>
```

```
smallest=num;
System.out.println("If u want to enter more type y");
opt=sc.next().charAt(0);
}
while(opt=='y');
System.out.println("the largest numbers is "+ largest);
System.out.println("the negative numbers is "+smallest);
}
}
```