Q.1 Write a program to add two numbers.

```
 import java.util.Scanner;
class Cls
{
public static void main(String[] args)
{
Scanner sc=new Scanner(System.in);
int a,b,c;
System.out.println("enter two values");
a=sc.nextInt();
b=sc.nextInt();
c=a+b;
System.out.println(c);
}
}
```

Q.2 Write a program to find the area of circle.

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

```
{
Scanner sc=new Scanner(System.in);
float a,r;
 float pi=3.14f;

System.out.println("enter radius");
r=sc.nextFloat();



a=pi*(float)Math.pow(r,2);
System.out.println("Area of circle is"+a);
}
}
```

Q.3 Write a program to find the volume of cone.

```
import java.util.Scanner;
class Cls
{
public static void main(String[] args)
{
Scanner sc=new Scanner(System.in);
float h,r,v;
 float pi=3.14f;

System.out.println("enter radius");
r=sc.nextFloat();
```

```
System.out.println("enter height");
h=sc.nextFloat();
v=(pi*r*r*h)/3;
System.out.println("Volume of cone is"+v);
}
}
```

Q.4 Write a program to find the factorial of a number.

```
import java.util.Scanner;
class Cls
{
public static void main(String[] args)
{
Scanner sc=new Scanner(System.in);
int f=1;
int n;
System.out.println("enter a number");
n=sc.nextInt();
 while(n>0)
{
f=f*n;
n--;
}
System.out.println("Factorial is:"+f);
}
}
```

Q.5 Write a program to check whether a year is leap year or not.

```
import java.util.Scanner;
class Cls
{
public static void main(String[] args)
{
int y;
Scanner sc=new Scanner(System.in);
System.out.println("Enter the year");
y=sc.nextInt();
if(y%400==0 ||(y%4==0 && y%100!=0))
System.out.println("leap year");
else
System.out.println("non  leap  year");
}
}
```

Q.6 Write a program to swap two numbers.

```
import java.util.Scanner;
 class Cls
 {
 public static void main(String[] args)
 {
 int a,b;
```

```
Scanner sc=new Scanner(System.in);
System.out.println("Enter two numbers");
a=sc.nextInt();
b=sc.nextInt();
System.out.println("Before swap a= "+a+" and b=" +b);
a=a+b;
b=a-b;
a=a-b;
System.out.println("After swap a= "+a+" and b=" +b);


}
}
```

Q.7 Write a program to find the simple interest.

```
import java.util.Scanner;
class Cls
{
public static void main(String[] args)
{
float p,r,t,si;
Scanner sc=new Scanner(System.in);
System.out.println("Enter principal");
p=sc.nextFloat();
System.out.println("Enter rate");
r=sc.nextFloat();
```

```
System.out.println("Enter time");
t=sc.nextFloat();
si=(p*r*t)/100;

System.out.println("simple interest  is:"+si);



}
}
```

Q 8. Write aprogram to check whether the triangle can be formed when all the sides are given.

```
import java.util.Scanner;
class Cls
{
public static void main(String[] args)
{
float a,b,c;
Scanner sc=new Scanner(System.in);
System.out.println("Enter three sides");
a=sc.nextFloat();
b=sc.nextFloat();
c=sc.nextFloat();
if(a+b>c && b+c>a && c+a>b)
System.out.println("Triangle can be formed");
else
```

```
System.out.println("Triangle cannot be formed");
}
}
```

Q.9 Write a program to check whether a number is negative or positive or zero.

```
import java.util.Scanner;
class Cls
{
public static void main(String[] args)
{
int a;
Scanner sc=new Scanner(System.in);
System.out.println("Enter the number");
a=sc.nextInt();

if(a>0)
System.out.println("Number is positive");
else if(a<0)
System.out.println("Number is negative");
else
System.out.println("Number is zero");

}
}
```

Q.10 Write a program to check whether a number is prime or not.

```
import java.util.Scanner;
class Cls
{
public static void main(String[] args)
{
int a,i=0,c=0;
Scanner sc=new Scanner(System.in);
System.out.println("Enter the number");
a=sc.nextInt();
for(i=2;i<=Math.sqrt(a);i++)
{ if(a%i==0)
c++;
}

if(c==0)
System.out.println("Number is prime");
else
System.out.println("Number is not prime");

}
}
```