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Program 1:

```
Using Scanner class find simple rate of interest
```

```
import java.util.Scanner;
public class SimpleInterest {
      public static void main(String[] args) {
             // TODO Auto-generated method stub
        float p, r, t;
        Scanner \underline{s} = \mathbf{new} Scanner(System. \mathbf{in});
        System.out.print("Enter the Principal : ");
        p = s.nextFloat();
        System.out.print("Enter the Rate of interest : ");
        r = s.nextFloat();
        System.out.print("Enter the Time period : ");
        t = s.nextFloat();
        float si;
        si = (r * t * p) / 100;
        System.out.print("The Simple Interest is : " + si);
}
Output:
Enter the Principal : 400
Enter the Rate of interest : 5
Enter the Time period : 7
The Simple Interest is : 140.0
Program-2
Find area of triangle using Scanner class method
import java.util.Scanner;
public class AreaOfTriangle {
      public static void main(String[] args) {
             // TODO Auto-generated method stub
             Scanner s= new Scanner(System.in);
                System.out.println("Enter the width of the Triangle:");
                double b= s.nextDouble();
```

```
System.out.println("Enter the height of the Triangle:");
                 double h= s.nextDouble();
                         //Area = (width*height)/2
             double area=(b*h)/2;
             System.out.println("Area of Triangle is: " + area);
      }
}
Output:
Enter the width of the Triangle:
Enter the height of the Triangle:
Area of Triangle is: 15.0
Program-3
Find addition, substraction, division, multiplication using scanner class method
import java.util.Scanner;
public class calculation {
      public static void main(String[] args) {
             // TODO Auto-generated method stub
        int m, n, opt, add, sub, mul;
        double div;
        Scanner \underline{s} = \mathbf{new} Scanner(System. \mathbf{in});
        System.out.print("Enter first number:");
        m = s.nextInt();
        System.out.print("Enter second number:");
        n = s.nextInt();
        while(true)
        {
            System.out.println("Enter 1 for addition");
            System.out.println("Enter 2 for subtraction");
            System.out.println("Enter 3 for multiplication");
            System.out.println("Enter 4 for division");
            System.out.println("Enter 5 to Exit");
            opt = s.nextInt();
```

```
{
                case 1:
                add = m + n;
                System.out.println("Result:"+add);
                break;
                case 2:
                sub = m - n;
                System.out.println("Result:"+sub);
                break;
                case 3:
                mul = m * n;
                System.out.println("Result:"+mul);
                break;
                case 4:
                div = (double)m / n;
                System.out.println("Result:"+div);
                break;
                case 5:
                System.exit(0);
            }
        }
    }
}
```

switch(opt)

Output:

```
Enter first number:4
Enter second number:5
Enter 1 for addition
Enter 2 for subtraction
Enter 3 for multiplication
Enter 4 for division
Enter 5 to Exit
Result:9
Enter 1 for addition
Enter 2 for subtraction
Enter 3 for multiplication
Enter 4 for division
Enter 5 to Exit
Result:-1
Enter 1 for addition
Enter 2 for subtraction
Enter 3 for multiplication
Enter 4 for division
Enter 5 to Exit
Result:20
Enter 1 for addition
Enter 2 for subtraction
Enter 3 for multiplication
Enter 4 for division
Enter 5 to Exit
Result:0.8
Enter 1 for addition
Enter 2 for subtraction
Enter 3 for multiplication
Enter 4 for division
Enter 5 to Exit
Program-4:
Find square root and cube using scanner class
import java.util.Scanner;
public class SqareCube {
      public static void main(String[] args) {
             // TODO Auto-generated method stub
              Scanner <u>sc</u> = new Scanner(System.in);
               int num;
               System.out.print("Enter an integer number: ");
               num = sc.nextInt();
               System.out.println("Square of " + num + " is: " + Math.pow(num,
2));
```

System.out.println("Cube of " + num + " is: " + Math.pow(num, 3));

```
System.out.println("Square Root of " + num + " is: " +
Math.sqrt(num));
           }
}
Output:
Enter an integer number: 5
Square of 5 is: 25.0
Cube of 5 is: 125.0
Square Root of 5 is: 2.23606797749979
Program-5
Find positive and negative number using Scanner class
import java.util.Scanner;
public class PsitiveNegative {
      public static void main(String[] args) {
             // TODO Auto-generated method stub
        int n;
        Scanner \underline{s} = new Scanner(System.in);
        System.out.print("Enter the number you want to check:");
        n = s.nextInt();
        if(n > 0)
        {
            System.out.println("The given number "+n+" is Positive");
        }
        else if(n < 0)
        {
            System.out.println("The given number "+n+" is Negative");
        }
        else
            System.out.println("The given number "+n+" is neither Positive nor
Negative ");
        }
    }
```

```
}
```

Output:

```
Enter the number you want to check:-78 The given number -78 is Negative
```

Program-6

Swapping two numbers using scanner class

```
import java.util.Scanner;
public class SwapUsingScanner {
      public static void main(String[] args) {
            // TODO Auto-generated method stub
            int c;
            Scanner sc=new Scanner(System.in);
            System.out.println("Enter first number");
            int a=sc.nextInt();
            System.out.println("Enter second number");
            int b=sc.nextInt();
            //<u>int</u> a=200,b=100,c;
            System.out.println("-----");
System.out.println("a="+a);
            System.out.println("b="+b);
            c=a;
            a=b;
            b=c;
            System.out.println("-----");
            System.out.println("a="+a);
            System.out.println("b="+b);
      }
}
```

Output:

```
Enter first number
45
Enter second number
67
------Before swap------
a=45
b=67
------After swap------
a=67
b=45
```