

1. Write a Java program to print an int, a double and a char on screen

```
package Assignments_Level1;

import java.util.Scanner;

public class Print_int_double_char {
    //Write a Java program to print an int, a double and a char on screen
    public static void main(String[] args) {
        int num_int;
        double num_double;
        char num_char;
        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter an Integer Value: ");
        num_int= scanner.nextInt();
        System.out.println("Enter a double value: ");
        num_double=scanner.nextDouble();
        System.out.println("Enter a character: ");
        num_char=scanner.next().charAt(0);

        System.out.println("Entered integer value is: "+num_int);
        System.out.println("Entered Double value is: "+num_double);
        System.out.println("Entered character value is: "+num_char);
    }
}
```

2. //Write a program to print the area of a rectangle of sides 2 and 3 units respectively

```
package Assignments_Level1;

import org.w3c.dom.ls.LSOutput;

import java.util.Scanner;

public class Area_Rectangle {
    //Write a program to print the area of a rectangle of sides 2 and 3 units respectively
    public static void main(String[] args) {

        int side1=2,side2=3,area=0;
        //area of rectangle is side1*side2
        area=side1*side2;

        System.out.println("Area of rectangle is: "+area+" Sq.Units");
    }
}
```

```
}
```

3. Write a program to print the product of the numbers 8.2 and 6

```
package Assignments_Level1;

public class product {
    //Write a program to print the product of the numbers 8.2 and 6

    public static void main(String[] args) {
        double num1=8.2,num2=6,prod=0;
        prod=num1*num2;
        System.out.println("Product of "+num1+" and "+num2+" is:
"+String.format("%.2f", prod));
    }
}
```

4. Print the ASCII value of the character 'h'

```
package Assignments_Level1;

public class AsciiValue {
    //Print the ASCII value of the character 'h'.
    public static void main(String[] args) {
        char c='h';
        int n=c;

        System.out.println("ASCII value of "+c+" is :"+n);
    }
}
```

5. Write a program to assign a value of 100.235 to a double variable and then convert it to int

```
package Assignments_Level1;

public class Convert_int {
    //Write a program to assign a value of 100.235 to a double
variable and
    // then convert it to int

    public static void main(String[] args) {
        double num=100.235;
        int num_int=0;
        num_int= (int) num;
        System.out.println(num+" converted to int will give value:
"+num_int);
    }
}
```

```
}
```

6. Write a program to add 3 to the ASCII value of the character 'd' and print the equivalent character.

```
package Assignments_Level1;

public class AsciiValueAdd {

    //Write a program to add 3 to the ASCII value of the character
    'd' and
    // print the equivalent character.
    public static void main(String[] args) {
        char c='d';
        int ascii_num=c;
        System.out.println("ASCII value of 'd' is: "+ascii_num);
        ascii_num=ascii_num+3;
        c= (char) ascii_num;
        System.out.println(c);
    }
}
```

7. Write a program to add an integer variable having value 5 and a double variable having value 6.2

```
package Assignments_Level1;

public class AddIntDouble {
    //Write a program to add an integer variable having value 5 and
    // a double variable having value 6.2
    public static void main(String[] args) {
        double double_num=6.2;
        int int_num=5;
        System.out.println("Sum of "+double_num+" and "+int_num+"
is: "+(double_num+int_num));
    }
}
```

8. Write a program to find the square of the number 3.9

```
package Assignments_Level1;

public class square {
    //Write a program to find the square of the number 3.9

    public static void main(String[] args) {
        double num=3.9,square_num;
```

```

        square_num=num*num;
        System.out.println("The square of number "+num+" is :
"+String.format("%.2f", square_num));
    }
}

```

Operators:

1.Length and breadth of a rectangle are 5 and 7 respectively.Write a program to calculate the area and perimeter of the

```

package Assignments_Level1;

public class AreaPerimeterRectangle {

    //Length and breadth of a rectangle are 5 and 7 respectively.
    // Write a program to calculate the area and perimeter of the
rectangle
    //Area of rectangle=l*b
    //Perimeter=2(l+b)

    public static void main(String[] args) {

        int lenght=5,breadth=7,area=0,perimeter=0;
        area=lenght*breadth;
        perimeter=2*(lenght+breadth);
        System.out.println("Area of Rectangle is: "+area);
        System.out.println("Perimeter of rectangle is:
"+perimeter);

    }
}

```

2.Write a program to calculate the perimeter of a triangle having sides of length 2,3 and 5 units

```

package Assignments_Level1;

public class PerimeterTriangle {

    //Write a program to calculate the perimeter of a
    // triangle having sides of length 2,3 and 5 units

    public static void main(String[] args) {

```

```

        int side1=2,side2=3,side3=5,perimeter=0;
        perimeter=side1+side2+side3;
        System.out.println("Perimeter of triangle is: "+perimeter+"
units");
    }
}

```

3. Write a program to convert Fahrenheit into Celsius

```

package Assignments_Level1;

import java.util.Scanner;

public class FaranheatToCelcius {
    //Write a program to convert Fahrenheit into Celsius

    public static void main(String[] Strings) {

        Scanner input = new Scanner(System.in);

        System.out.print("Input a degree in Fahrenheit: ");
        double fahrenheit = input.nextDouble();

        double celsius = ((5 * (fahrenheit - 32.0)) / 9.0);
        System.out.println(fahrenheit + " degree Fahrenheit is
equal to " + String.format("%.2f",celsius) + " in Celsius");
    }
}

```

Input by user:

- 1. Write a program to take two integer inputs from user and print sum and product of them.**

```

package Assignments_Level1;

import java.util.Scanner;

//Take two integer inputs from user. First calculate the sum of two then
product of two. Finally, print the sum and product of both obtained results
public class SumOfTwoInt {

    public static void main(String[] args) {
        int num1=0,num2=0,sum=0,prod=0;

        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter first integer number: ");
    }
}

```

```

        num1=scanner.nextInt();
        System.out.println("Enter second integer number: ");
        num2=scanner.nextInt();
        sum=num1+num2;
        prod=num1*num2;
        System.out.println("Sum of "+num1+" and "+num2+" is :"+sum);
        System.out.println("Product of "+num1+" and "+num2+" is :"+prod);
    }
}

```

2. Take two integer inputs from user. First calculate the sum of two then product of two. Finally, print the sum and product of both obtained results

```

package Assignments_Level1;

import java.util.Scanner;

//Take two integer inputs from user. First calculate the sum of two then
product of two. Finally, print the sum and product of both obtained results
public class SumOfTwoInt {

    public static void main(String[] args) {
        int num1=0,num2=0,sum=0,prod=0;

        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter first integer number: ");
        num1=scanner.nextInt();
        System.out.println("Enter second integer number: ");
        num2=scanner.nextInt();
        sum=num1+num2;
        prod=num1*num2;
        System.out.println("Sum of "+num1+" and "+num2+" is :"+sum);
        System.out.println("Product of "+num1+" and "+num2+" is :"+prod);
    }
}

```

3. Ask user to give two double input for length and breadth of a rectangle and print area type casted to int

```

package Assignments_Level1;
public class AreaTypeCastInt {
    //Ask user to give two double input for length and breadth of a rectangle
and print area type casted to int
    public static void main(String[] args) {
        double length=5,breadth=7;
        int area= (int) (length*breadth);
        System.out.println("Area of Rectangle is: "+area);
    }
}

```

```
}
```

Conditional Statement

1. Take values of length and breadth of a rectangle from user and check if it is square or not

```
package Assignments_Level1;

import java.util.Scanner;

public class ChecckSquare {

    //Take values of length and breadth of a rectangle from user and
    check if it is square or not
    public static void main(String[] args) {
        int lenght,breadth;
        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter the length of rectangle :");
        lenght=scanner.nextInt();
        System.out.println("Enter breadth of rectangle ;");
        breadth=scanner.nextInt();

        if(lenght==breadth)
            System.out.println("It is a Square");
        else
            System.out.println("Not a Square");
    }
}
```

2. Take two int values from user and print greatest among them

```
package Assignments_Level1;

import java.util.Scanner;

public class GratestOfTwoNum {

    public static void main(String[] args) {

        int num1,num2;
```

```

Scanner scanner=new Scanner(System.in);
System.out.println("Enter the first number :");
num1=scanner.nextInt();
System.out.println("Enter the second number ;");
num2=scanner.nextInt();
if(num1>num2)
    System.out.println(num1+" is grater than "+num2);
else if(num1<num2)
    System.out.println(num2+" is grater than "+num1);
else
    System.out.println("Both numbers are equal");
}
}

```

- 3. A shop will give discount of 10% if the cost of purchased quantity is more than 1000. Ask user for quantity Suppose, one unit will cost 100. Judge and print total cost for user.**

```

package Assignments_Level1;

import java.util.Scanner;

public class DiscountQuantity1000 {
    //A shop will give discount of 10% if the cost of purchased
    quantity is more than 1000.
    // Ask user for quantity Suppose,
    // one unit will cost 100. Judge and print total cost for user.

    public static void main(String[] args) {
        int quantity=0;
        double amount=0,tot_amount=0;
        Scanner s=new Scanner(System.in);
        System.out.println("Enter number of units purchased :");
        quantity=s.nextInt();
        System.out.println("Enter the cost/price of one unit: ");
        amount=s.nextDouble();
        tot_amount=quantity*amount;
        if(tot_amount>=1000) {
            tot_amount = tot_amount + tot_amount * .1;
            System.out.println("Total AMount to be paid: " +
tot_amount);
        }
        else
            System.out.println("Total AMount to be paid: " +
tot_amount);
    }
}

```



```
}
```

4. A company decided to give bonus of 5% to employee if his/her year of service is more than 5 years. Ask user for their salary and year of service and print the net bonus amount

```
package Assignments_Level1;

import java.util.Scanner;

public class SalaryBonus5 {

    //A company decided to give bonus of 5% to employee if his/her
    year of service is more than 5 years.
    // Ask user for their salary and year of service and print the
    net bonus amount

    public static void main(String[] args) {
        Scanner scanner=new Scanner(System.in);
        double salary,years_service;
        System.out.println("Enter the salary of Employee: ");
        salary=scanner.nextDouble();
        System.out.println("Enter number of years of service: ");
        years_service=scanner.nextDouble();

        if(years_service>=5) {
            salary = salary + salary * .05;
            System.out.println("Salary of Employee is: "+salary);
        }
        else
            System.out.println("Salary of Employee is: "+salary);
    }
}
```

5. A school has following rules for grading system
a. Below 25 - Fb. 25 to 45 - Ec. 45 to 50 - Dd.
50 to 60 - Ce. 60 to 80 - Bf. Above 80 - A
Ask user to enter marks and print the corresponding grade

```
package Assignments_Level1;

import java.util.Scanner;

public class SchoolGrade {

    //A school has following rules for grading system
```

```

//a. Below 25 - Fb. 25 to 45 - Ec. 45 to 50 - Dd.
// 50 to 60 - Ce. 60 to 80 - Bf. Above 80 - A
//Ask user to enter marks and print the corresponding grade
public static void main(String[] args) {
    int marks=0;
    Scanner scanner=new Scanner(System.in);
    System.out.println("Enter marks of students: ");
    marks=scanner.nextInt();
    if(marks>80)
        System.out.println("Grade of student is: A");
    else if(marks>60)
        System.out.println("Grade of student is: B");
    else if(marks>50)
        System.out.println("Grade of student is: C");
    else if(marks>45)
        System.out.println("Grade of student is: D");
    else if (marks>=25)
        System.out.println("Grade of student is: E");
    else
        System.out.println("Grade of student is: F");
}
}

```

6. Take input of age of 3 people by user and determine oldest and youngest among them

```

package Assignments_Level1;

import java.util.Scanner;

public class AgeOldYoung {

    //Take input of age of 3 people by user and determine oldest
    and youngest among them
    public static void main(String[] args) {
        Scanner scanner=new Scanner(System.in);
        int age1,age2,age3;
        System.out.println("Enter the age of 3 people");
        age1=scanner.nextInt();
        age2=scanner.nextInt();
        age3=scanner.nextInt();
        if(age1>age2 && age1>age3)
            System.out.println("Age of 1st person is more: "+age1);
        else if(age2>age1 && age2>age3)
            System.out.println("Age of second person is more
"+age2);
        else if(age3>age1 && age3>age2)

```

```

        System.out.println("Age of third person is more
"+age3);
    else
        System.out.println("Age is same for all");
    if(age1<age2 && age1<age3)
        System.out.println("First person is youngest among the
there with age: "+age1);
    else if(age2<age1 && age2<age3)
        System.out.println("Second person is youngest among the
there with age: "+age2);
    else if(age3<age1 && age3<age2)
        System.out.println("Third person is youngest among the
there with age: "+age3);
    else
        System.out.println("Age is same for all");

}
}

```

7. Write a program to print absolute vlaue of a numberentered by user.

```

package Assignments_Level1;

import java.util.Scanner;

public class AbsoluteValueNum {
    //Write a program to print absolute vlaue of a numberentered by
    user.
    // E.g.-INPUT: 1          OUTPUT:
    // 1INPUT: -1          OUTPUT: 1

    public static void main(String ang[]) {
        Scanner scanner = new Scanner(System.in);
        int num;
        System.out.println("Enter a number :");
        num=scanner.nextInt();
    // Finding absolute value
        num=Math.abs(num);
        System.out.println("Absolute value:"+num);
    }
}

```

8. A student will not be allowed to sit in exam if his/her attendance is less than 75%.Take following input from userNumber of classes heldNumber of classes attended.And print percentage of class attended Is student is allowed to sit in exam or not

```

package Assignments_Level1;

import java.util.Scanner;

public class AttendanceExam {

    //A student will not be allowed to sit in exam if his/her
    attendance is less than 75%.
    // Take following input from userNumber of classes heldNumber
    of classes attended.
    // And print percentage of class attended Is student is allowed
    to sit in exam or not

    public static void main(String[] args) {
        Scanner scanner=new Scanner(System.in);
        double classes_held,classes_attended;
        double percentage;
        System.out.println("Enter number of classes held: ");
        classes_held=scanner.nextDouble();
        System.out.println("Enter number of classes attended :");
        classes_attended=scanner.nextDouble();

        percentage=((classes_attended/classes_held) * 100);
        System.out.println("Percentage of class attended:
        "+percentage+"%");
        if (percentage<75)
            System.out.println("Student is not allowed to sit for
        exam");
        else
            System.out.println("Student is allowed to sit for
        exam");
    }
}

```

9. Modify the above question to allow student to sit if he/she has medical cause. Ask user

10.

```

package Assignments_Level1;

import java.util.Scanner;

public class AttendanceExam {

    //Modify the above question to allow student to sit if he/she
    has medical cause. Ask user

```

```

        // if he/she has medical cause or not ( 'Y' or 'N' ) and print accordingly
        public static void main(String[] args) {
            Scanner scanner=new Scanner(System.in);
            double classes_held,classes_attended;
            double percentage;
            char medicalCause;
            System.out.println("Enter number of classes held: ");
            classes_held=scanner.nextDouble();
            System.out.println("Enter number of classes attended :");
            classes_attended=scanner.nextDouble();

            percentage=((classes_attended/classes_held) * 100);
            System.out.println("Percentage of class attended:
"+percentage+"%");
            if (percentage<75) {
                System.out.println("Any medical cause:y/n :");
                medicalCause = scanner.next().charAt(0);
                if (medicalCause=='y')
                    System.out.println("Student is allowed to sit even
if the attendance is less than 75% as they are having some medical
condition");
                else
                    System.out.println("Student is not allowed to sit
for exam");
            }
            else
                System.out.println("Student is allowed to sit for
exam");
        }
    }
}

```

10. If $x = 2$, $y = 5$, $z = 0$ then find values of the following expressions:

- a. $x == 2$
- b. $x != 5$
- c. $x != 5 \ \&\& \ y \geq 5$
- d. $z != 0 \ || \ x == 2$
- e. $!(y < 10)$

```
package Assignments_Level1;
```

```
public class Assignment10 {
```

```

    //If  $x = 2$   $y = 5$   $z = 0$  then find values of the following
expressions:

```

```

    // a. x == 2 b. x != 5 c. x != 5 && y >= 5 d. z != 0 || x ==
2e. !(y < 10)
    public static void main(String[] args) {
        int x=2,y=5,z=0;
        System.out.println(x==2);
        System.out.println(x!=5);
        System.out.println(x!=5 && y>=5);
        System.out.println(z!=0 || x==2);
        System.out.println(!(y<10));

    }
}

```

11. Write a program to check whether a entered character is lowercase (a to z) or uppercase (A to Z)

```

package Assignments_Level1;

import java.util.Scanner;

public class LowerOrUpperCase {

    //Write a program to check whether a entered character
    // is lowercase ( a to z ) or uppercase ( A to Z ).
    public static void main(String[] args) {
        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter the character: ");
        char c=scanner.next().charAt(0);
        if(c>='A' && c<='Z')
            System.out.println("Entered character is in upper
case");
        else if (c>='a' && c<='z')
            System.out.println("Entered character is in lower
case");
        else
            System.out.println("Entered character is not an
alphabet");
    }
}

```