Conditionals

Assignment Questions

PW SKILLS

Q1 - Write a program which takes the values of length and breadth from user and check if it is a square or not. (Easy)

Sample Input :

Enter length:

5

Enter breadth:

4

Sample Output : It is a rectangle

```
import java.util.Scanner;

public class prac_conditional {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      int l = sc.nextInt();
      int b = sc.nextInt();

      if (l == b) {
         System.out.println("it is square");
      } else {
         System.out.println("it is a rectangle");
      }

   }

}
```

Q2 - Write a program to print absolute value of a number entered by the user. (Easy)

Sample Input : -1

Sample Output : 1

```
import java.util.Scanner;

public class prac_conditional {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      int n = sc.nextInt();
         System.out.println(Math.abs(n));

   }

}
```

Q3 - Write a program to take input from user for Cost Price (C.P.) and Selling Price(S.P.) and calculate Profit or Loss. (Easy)

Explanation : Formula for profit and loss

Profit = S.P - C.P

Loss = C.P - S.P

(S.P is Selling Price and C.P is Cost Price)

Sample Input :

Enter cost price: 4000

Enter selling price: 9560

Sample Output :

Profit = 5560

```
import java.util.Scanner;

public class prac_conditional {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter your cost price");
      int C_P = sc.nextInt();
      System.out.println("Enter your selling price");
      int S_P = sc.nextInt();
      if (S_P >= C_P){
         System.out.println("Profit is :" + (S_P - C_P));
      }
      else
      {
         System.out.println(" Lose is :" + ( C_P - S_P));
      }

   }

}
```

```
import java.util.Scanner;

public class prac_03 {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter a number");
      int n = sc.nextInt();
      if (n<0) {
         System.out.println("The number is negative and skipped");
      }
      else {
         System.out.println(n);
      }
   }
}
```

Q4 - Write a program to print positive number entered by the user, if user enters a negative number, it is skipped (Easy)

Sample Input : Enter an integer: -6

Sample Output : The number is negative and skipped

Q5 - Create a calculator using switch statement to perform addition, subtraction, multiplication and division. (Medium)

Sample Input :

Enter an operator (+, -, *, /): -

Enter two numbers:

6

8

Sample Output : 6 - 8 = -2

```
import java.util.Scanner;
public class Simple_Calculator {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter your first Number");
      double Num_01 = sc.nextDouble();
      System.out.println("Enter your second number");
      double Num_02 = sc.nextDouble();
      System.out.println("Enter your optartor(+,-,*,/)");
      char oprator = sc.next().charAt(0);
       double result ;
       switch (oprator){
          case '+' :
             result = Num_01 + Num_02 ;
             break;
          case '-' :
             result = Num_01 - Num_02 ;
             break;
          case '*' :
             result = Num_01 * Num_02;
             break;
          case  '/':
             result = Num_01 / Num_02;
          default:
             System.out.println("Invalid input");
           return;
       }
      System.out.println("Num_01"+oprator+"Num_02 = :" +result);
   }
}
```

Q6 - Write a program to calculate marks to grades . Follow the conversion rule as given below : (Medium)

100 – 90	A+
90 – 80	A
80 – 70	B+
70 – 60	B
60 – 50	C
50 – 40	D
40 – 30	E
30 – 0	F

Sample Input : Enter Your Marks: 98

Sample Output : Your Grade is A+

```
import java.util.Scanner;

public class Calculator_ques {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        if (n >= 0 && n <= 30){
            System.out.println("F");
        } else if (n> 30 && n <= 40) {
            System.out.println("E");
        } else if (n > 40 && n <= 50) {
            System.out.println("D");
        } else if (n > 50 && n <=60) {
            System.out.println("C");
        } else if (n > 60 && n <=70) {
            System.out.println("B");
        } else if (n > 70 && n <=80) {
            System.out.println("B+");
        } else if (n > 80 && n <=90) {
            System.out.println("A");
        } else if (n > 90 && n <=100) {
            System.out.println("A+");
        } else
            System.out.println("Enter number between 100 to 0");
    }
}
```