

Program using If Statement

1)Eligibility of vote

```
public class Task10 {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter your age:");  
        int age = sc.nextInt();  
        if (age >= 18)  
        {  
            System.out.println("You are eligible to vote.");  
        }  
        else  
        {  
            System.out.println("You are not eligible to vote.");  
        }  
    }  
}
```

2) Password checking

```
import java.util.Scanner;

public class Task10 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        String correctPassword = "password123";

        System.out.println("Enter your password:");

        String password = sc.nextLine();

        if (password.equals(correctPassword)) {

            System.out.println("Access granted.");

        } else {

            System.out.println("Access denied.");

        }

    }

}
```

3)age calculation

```
public class Task10{  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter your age:");  
        int age = sc.nextInt();  
        if (age >= 0 && age <= 12) {  
            System.out.println("You are a Child.");  
        } else if (age >= 13 && age <= 19) {  
            System.out.println("You are a Teenager.");  
        } else if (age >= 20 && age <= 59) {  
            System.out.println("You are an Adult.");  
        } else if (age >= 60) {  
            System.out.println("You are a Senior.");  
        } else {  
            System.out.println("Invalid age.");  
        }  
    }  
}
```

4)positive,Negative,Zero

```
public class Task10
```

```
{  
    public static void main(String[] args)  
    {  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter a number:");  
        int number = sc.nextInt();  
        if (number > 0)  
        {  
            System.out.println(number + " is positive.");  
        }  
        else if (number < 0)  
        {  
            System.out.println(number + " is negative.");  
        }  
        else  
        {  
            System.out.println("The number is zero.");  
        }  
    }  
}
```

5)Grade calculation

```
public class Task10 {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter your score:");  
        int score = sc.nextInt();  
        if (score >= 90) {  
            System.out.println("Grade: A");  
        } else if (score >= 80) {  
            System.out.println("Grade: B");  
        } else if (score >= 70) {  
            System.out.println("Grade: C");  
        } else if (score >= 60) {  
            System.out.println("Grade: D");  
        } else {  
            System.out.println("Grade: F");  
        }  
    }  
}
```

Program Using Switch Statement

1)check alphabet is vowel or consonent

```
public class Task10 {  
    public static void main(String[] args) {  
        Scanner sc=new Scanner(System.in);  
        System.out.println("enter the alphebet");  
        String alphabet=sc.nextLine();  
        switch(alphabet)  
        {  
            case"a":  
            case"e":  
            case"i":  
            case"o":  
            case"u":  
            case"A":  
            case"E":  
            case"I":  
            case"O":  
            case"U":  
                System.out.println("it is vowel");  
            }  
        }  
    }  
}
```

```
break;
default:
{
    System.out.println("it is consonent");
}
}
}
```

2)Simple Calculater

```
public class Task10
```

```
{
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter first number:");
        int num1 = sc.nextInt();
```

```
        System.out.println("Enter second number:");
        int num2 = sc.nextInt();
```

```
        System.out.println("Choose an operation (+, -, *,
/,%):");
```

```
char Calculators = sc.next().charAt(0);

switch(Calculators)
{
case '+':
    System.out.println(num1+num2);
    break;
case '-':
    System.out.println(num1-num2);
    break;
case '*':
    System.out.println(num1*num2);
    break;
case '/':
    System.out.println(num1/num2);
    break;
case '%':
    System.out.println(num1%num2);
    break;
default:
    System.out.println("Invalid operation");
```


}

}

}