**DAY -2**

**Control Statements – Assignment Questions**

1. **Check Whether a Character is a Vowel or Consonant** o Input: A single alphabet character o Output: Whether it is a **vowel** or a **consonant** o
2. Example: 'a' → Vowel, 'z' → Consonant

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner sc =new Scanner(System.in);

char alp=sc.next().charAt(0);

if(alp=='a'||alp=='e'||alp=='i'||alp=='o'||alp=='u'||alp=='A'||alp=='E'||alp=='I'||alp=='O'||alp=='U')

System.out.println("It is vowel");

else

System.out.println("It is consonant");

}

}

**Print the Grade Based on Marks**

o Input: Marks (0 to 100)

o Use if-else ladder to print:

▪ 90–100 → Grade A

▪ 75–89 → Grade B

▪ 60–74 → Grade C

▪ 40–59 → Grade D

▪ Below 40 → Fail

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner sc =new Scanner(System.in);

double prin=sc.nextDouble();

double rate=sc.nextDouble();

double time=sc.nextDouble();

double Si=prin\*rate\*time/100;

double amount = prin \* Math.pow((1 + rate / 100), time);

System.out.println("The simple interest "+prin);

System.out.println("The compound interest "+amount);

}

}

**4Print All Prime Numbers from 1 to N**

o Input: A number N

o Output: All prime numbers between 1 and N using for loop and if conditions

PROGRAM:

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

int count=0;

Scanner sc =new Scanner(System.in);

int p=sc.nextInt();

for(int i=2;i<p;i++){

if(p%i==0)

count++;

}

if(count==0)

System.out.println("It is prime number");

else

System.out.println("It may be nor prime nor composite");

}

}