Tender Heart High School

Class-VIII **Computer Application** 25.11.2024

Topic:-Java Programs with solution

Good Morning

Students this lesson is for class VIII, for the subject of computers. Topic for today is programsgiven in lab activity chapter Introduction to java (ch-5) and Decision control statement (ch-6):

1. Write a program in Java to print statement Hello World

```
class HelloWorld
{
public static void main(String args[])
{
System.out.print("Hello World");
}
}
```

2. Write a program to print, "Welcome to the World of Computers".

```
public class Welcome
{
public static void main(String args[])
{
System.out.print("Welcome to the World of  Computers");
}
```

3. Write a program to print your Name, Class, Roll_No, Marks and Age. Name this file,

`MyProfile'.

```
public class MyProfile
{
public static void main(String args[])
 {
System.out.println("Name: Lalit");
System.out.print("Class: 8F");
System.out.println("Roll No: 2");
System.out.print("Marks:  87");
System.out.println("Age:  14");
}
}
```

4. Write a program to print your School name four times in separate lines.

```
public class SchoolName
{
    public static void main(String args[]) {
     System.out.println("Tender Heart High School");
     System.out.println("Tender Heart High School ");
     System.out.println("Tender Heart High School ");
     System.out.println("Tender Heart High School ");
    }
}
```

5. Write a program to print sum of two numbers.

```
public class sumexample
{
public static void main(String[] args)
{
int num1 = 5, num2 = 15,sum;sum = num1+num2;
System.out.println("Sum of "+num1+" and "+num2+" is: "+sum);
}
}
```

6. Write a program to sum two numbers according to user choice.

```
public class Addnumbers
{
public static void main(int num1, int num2)
{
int sum;
System.out.println("Enter First Number: ");
System.out.println("Enter Second Number: ");
sum = num1 + num2;
System.out.println("Sum of these numbers: "+sum);
}
}
```

7. Write a program to check the number is odd or even.

```
public class evenodd
{
public static void main( int num)
{
System.out.print("Enter an Integer number: ");
if ( num % 2 == 0 )
System.out.println(num+" is an even number.");
else
System.out.println(num+" is an odd number.");
}
}
```

8. WAP to check the year is leap year or not.

```
public class leapyear
{
public static void main(int year)
{
System.out.println("Enter any Year:" +year);
if(year % 4 == 0 && year % 100 == 0 && year % 400 == 0)
{
System.out.println(year + " is a Leap Year."); else
System.out.println(year + " is not a Leap Year.");}}
```

9. Write a program to find the sum and average of three numbers.

```
public class SumAvg
{
public static void main(int a, int b, int c)
{
System.out.println("The three numbers are + a+ ", " + b+ ", " + c );
int sum = a + b + c;
double avg = sum / 3.0;
System.out.println("Sum = " + sum);
System.out.println("Average = " + avg);
}
}
```

10. Write a program to interchange the value of two numbers without using the third variable.

```
public class Swap
{
public static void main(int a, int b)
{
System.out.println("The numbers are:");
System.out.println("a=" + a  " b=" + b); a = a + b;
b = a - b;
a = a - b;
System.out.println("The numbers after interchange:");
System.out.println("a=" + a       " b=" + b);
}
}
```

11. Write a program to calculate the compound interest.

```
public class Interest
{
public static void main(double p, double r, int t) { double amt = (p * r * t)/100;
System.out.println("Compound Interest = " + amt);
}
}
```

12. Write a program to calculate the tax for a taxable income of Rs. 4,10,000, if the taxrate is fixed at 3.2%.

```
public class Tax
{
   public static void main(String
      args[]) {int income = 410000;
      double rate = 3.2;
      double tax = income * rate / 100;
      System.out.println("Tax = " + tax);
   }
}
```

13. Create a program that will generate a bill at McDonald's for four vegetable burgers (@ Rs 45 per vegetable Burger) and three vegetable McPuffs (@ Rs 25 per vegetableMcPuff). There is a special Independence Day discount of Rs 50 on the final bill amount.

```
public class McDBill
{
   public static void main(String
      args[]) {int vegBurgerCost =
      4 * 45;
      int vegMcPuffCost = 3 * 25;
      int total = vegBurgerCost +
      vegMcPuffCost;int amt = total - 50;
      System.out.println("4 Vegetable Burgers @ 45 = " + vegBurgerCost);
      System.out.println("3 Vegetable McPuffs @ 25 = " + vegMcPuffCost);
      System.out.println("Total = " + total);
      System.out.println("Discount = 50");
      System.out.println("Final Bill = " + amt);
   }
}
```

17 Program to check whether the product of two numbers is a buzz number or not.[A number that ends with 7 or is divisible by 7, is called a buzz number]

```
public class BuzzCheck
{
public static void buzzNumCheck(int a, int b)
{
int p = a * b; System.out.println("Product = " + p); if (p % 10 == 7 || p % 7 == 0)
System.out.println("Product is a Buzz Number"); else
System.out.println("Product is not a Buzz Number");
}
}
```

20. Write a program to print the largest of three numbers.

```
public class LargestNumber
{
public static void largestNumber(int a, int b, int c)
{
System.out.println("The three numbers are " + a ", " + b ", " + c);

System.out.print("Largest Number: "); if (a > b && a > c)
System.out.println(a); else if (b > a && b > c)
System.out.println(b); else
System.out.println(c);
}
}
```

22. Create a program to display whether the entered character is in uppercase or lowercase. ASCII value for lowercase is 65 to 90 and for uppercase is 97 to 122

```
public class LetterCheck
{
public static void checkLetter(char ch)
{
System.out.println("Entered character: " + ch); if (ch >= 65 && ch <= 90)
System.out.println("Uppercase"); else if (ch >= 97 && ch <= 122)
System.out.println("Lowercase"); else
System.out.println("Not a letter");
}
}
```

23. Accept hours from user and display equivalent minutes.

```
class Hours
{
 void main(int h)
{
 int Minutes= h*60;
 System.out.println("Converted value of hours into Minutes= "+ Minutes);
 }
}
```

24. Read 4 numbers from the user and display the sum of the first two numbers and product of the last two numbers.

```
class Abc
{
 void main(int a, int b, int c, int d)
{
int sum=a+b;
System.out.println("Sum of first two numbers ="+sum);
int pro=c*d;
System.out.println("Product of last two numbers ="+pro);
}
}
```

25. Accept meters and display equivalent km and meters.

```
class meter
{
void main(int m)
{
 int km= m/1000;
System.out.println("Accepted meters=" +m);
System.out.println("Converted value of m into km=" +km);
}
}
```

26. Accept minutes from the user and display equivalent hours and minutes.

```
class minute
{
void main(int m)
{
float h= m/60;
System.out.println("Accepted minutes=” +m);
System.out.println("Converted value of m into hours=” +h);
}
}
```

27. Accept centimeters and convert into equivalent meters and cm.

```
class conversion
{
void main(int cm)
{
int meter= cm/100;
System.out.println("Accepted cm are=” +cm);
System.out.println("Converted value of cm into m=” +m);
}
}
```

28. Read P, R and T from user and display simple interest.

```
class simple_interest
{
void main(int p, int r, int t)
{
double interest=p*r*t/100;
System.out.println("Simple interest="+interest);
}
}
```

29. Read 3 sides of a triangle and display the perimeter of triangle.

```
class perimeter
{
void main(int a, int b, int c)
{
int p=a+b+c;
System.out.println("Perimeter of triangle is="+p);
}
}
```

30. Program to accept two numbers and display the greater number.

```
class greater
{
void main(int n1, int n2)
{
 if(n1>n2)
{
System.out.println("Number 1 is greater than number 2.")
else
{
System.out.println("Number 2 is greater than number 1");
}
}
}
```

31. To accept sale price and cost price and display profit and loss.

```
class profit_loss
{
void main(int cp, int sp)
{
if(sp>cp)
```

```
{
int profit=sp-cp;
System.out.println("Profit="+profit);
}
else
{
int loss=cp-sp;
System.out.println("Loss="+loss);
}
}}
```

32. Accept a number and display even or odd.

```
class evenodd
{
void main(int no)
{
 if(no%2==0)
 System.out.println("Number is even");
 else
 System.out.println("Number is odd");
 }
}
```

33. Accept a number and display positive or negative.

```
class xyz
{
void main(int no)
{
 if(no>0)
System.out.println("Number is positive");
else
System.out.println("Number is negative");
}
}
```

34. Accept 2 numbers and display smaller.

```
class smaller
{
void main(int n1, int n2)
{
 if(n1<n2)
System.out.println("Number 1 is smaller.");
 else
System.out.println("Number 2 is smaller.”);
}
}
```

35. Accept 3 numbers and display the greatest.

```
class greater
{
void main(int n1, int n2, int n3)
{
if(n1>n2&&n1>n3)
System.out.println("Number 1 is greater.");
else
if(n2>n3&&n2>n1)
System.out.println("Number 2 is greater.”);
else
System.out.println("Number 3 is greater.”);
}
}
```

36. Accept 4 numbers and the sum of first two numbers is equivalent to the sum of last two numbers.

```
class calculation
{
void main(int n1, int n2, int n3, int n4)
int sum1=n1+n2;
int sum2=n3+n4;
if(sum1==sum2)
System.out.println("Sum of first two numbers is equivalent to the sum of last two numbers=");
else
System.out.println("Sum of first two numbers is not equivalent to the sum of last two numbers=");
}}
```

37. Accept 5 numbers and display the sum of the first 2 numbers and the product of last 3.

```
class Abc
{
void main(int n1, int n2, int n3, int n4, int n5)
{
 int sum=n1+n2;
System.out.println("Sum of first two numbers ="+sum);
int pro=n3*n4*n5;
System.out.println("Product of last three numbers ="+pro);
 }}
```

38. Accept the age of a person and display whether they are eligible to vote or not.

```
class eligibility
{
void main(int age)
{
 if(age>=18)
System.out.println("Person is eligible to vote.");
else
System.out.println("Person is not eligible to vote.”);
}
}
```

39.Accept a number and display whether it is divisible by 5 or not.

```
class check
{
void main(int no)
{
 if(no%5==0)
System.out.println("No is divisible by 5.");
else
 System.out.println("no is not divisible by 5.”);
}
 }
```

40.Read marks from user and display message (fail, average, good, very good or excellent) depending on the marks.

```
class Details
{
void main(int marks)
{ if(marks>=90)
System.out.println("Excellent.");
else
if(marks>=80)
System.out.println("Very Good.");
else
if(marks>=60)
System.out.println("Good.");
```

```
else
if(marks>=40)
System.out.println("Average.");
else
System.out.println("Fail.”);
}
                }
```