

## OOPS LAB EXERCISE

TEAM 3:Tavamani raja durai.j,kishore,jegatheshpathy,kamaleshwaren,yuvaraj.

program1:

```
public class JavaFindMinimumTwoNumberUsingConditionalOperator {
```

```
    public static void main(String args[]) {
```

```
        int i = 10;
```

```
        int j = 8;
```

```
        int result = (i < j) ? i : j;
```

```
        System.out.println(result + " is a minimum value");
```

```
    }
```

```
}
```

OUTPUT:

8 is a minimum value

program2:

```
public class JavaSumOfIntegersInRange {
```

```
    public static void main(String args[]) {
```

```
        int result = 0;
```

```
        for (int i = 100; i <= 200; i++) {  
  
            if (i % 7 == 0)  
  
                result += i;  
  
        }  
  
        System.out.println("Output of Program is : " + result);  
    }  
}
```

OUTPUT:

Output of Program is : 2107

program3:

```
import java.util.Scanner;  
  
class Harmonic  
  
{  
  
    public static void main(String... a)  
  
    {
```

```
System.out.print("Enter any number : ");
```

```
Scanner s = new Scanner(System.in);
```

```
int num = s.nextInt();
```

```
System.out.print("The Harmonic Series is : ");
```

```
double result = 0.0;
```

```
while(num > 0)
```

```
{
```

```
    result = result + (double) 1 / num;
```

```
    num--;
```

```
    System.out.print(result + "  ");
```

```
}
```

```
System.out.println("");
```

```
System.out.println("Output of Harmonic Series is "+result);
```

```
}
```

```
}
```

#### OUTPUT:

Enter any number : 5

The Harmonic Series is : 0.2   0.45   0.7833333333333333   1.2833333333333332  
2.2833333333333333

Output of Harmonic Series is 2.2833333333333333

#### program4:

```
public class NumberToWord
{
    private static final String[] specialNames = {
        "",
        " thousand",
        " million",
        " billion",
        " trillion",
        " quadrillion",
        " quintillion"
    };

    private static final String[] tensNames = {
        "",
```

```
    "ten",  
    "twenty",  
    "thirty",  
    "forty",  
    "fifty",  
    "sixty",  
    "seventy",  
    "eighty",  
    "ninety"  
};
```

```
private static final String[] numNames = {  
    "",  
    "one",  
    "two",  
    "three",  
    "four",  
    "five",  
    "six",  
    "seven",  
    "eight",  
    "nine",  
    "ten",  
    "eleven",  
    "twelve",  
};
```

```

    " thirteen",

    " fourteen",

    " fifteen",

    " sixteen",

    " seventeen",

    " eighteen",

    " nineteen"

};

private String convertLessThanOneThousand(int number) {

    String current;

    if (number % 100 < 20){

        current = numNames[number % 100];

        number /= 100;

    }

    else {

        current = numNames[number % 10];

        number /= 10;

        current = tensNames[number % 10] + current;

        number /= 10;

    }

    if (number == 0) return current;

    return numNames[number] + " hundred" + current;

```

```
}
```

```
public String convert(int number) {
```

```
    if (number == 0) { return "zero"; }
```

```
    String prefix = "";
```

```
    if (number < 0) {
```

```
        number = -number;
```

```
        prefix = "negative";
```

```
    }
```

```
    String current = "";
```

```
    int place = 0;
```

```
    do {
```

```
        int n = number % 1000;
```

```
        if (n != 0){
```

```
            String s = convertLessThanOneThousand(n);
```

```
            current = s + specialNames[place] + current;
```

```
        }
```

```
        place++;
```

```
        number /= 1000;
```

```
    } while (number > 0);
```

```

        return (prefix + current).trim();
    }

    public static void main(String[] args) {

        NumberToWord obj = new NumberToWord();

        System.out.println("*** " + obj.convert(123456789));

        System.out.println("*** " + obj.convert(-55));

    }
}

```

Input : 123456789

Output: Twelve crore thirty four lakhs fifty six thousand seven hundred eighty nine

program5:

```

import java.util.*;

class PalindromeExample2
{
    public static void main(String args[])
    {
        String original, reverse = ""; // Objects of String class

        Scanner in = new Scanner(System.in);

        System.out.println("Enter a string/number to check if it is a palindrome");

        original = in.nextLine();

        int length = original.length();

        for ( int i = length - 1; i >= 0; i-- )

```



```
        reverse = reverse + original.charAt(i);  
    if (original.equals(reverse))  
        System.out.println("Entered string/number is a palindrome.");  
    else  
        System.out.println("Entered string/number isn't a palindrome.");  
    }  
}
```

OUTPUT:

454

entered number is palindrome.