UNIVERSITY OF SINDH LAAR CAMPUS BADIN
BS(Computer Science) PART-I
2nd Semester 2023
Object Oriented Programming (Java)

Q.No.1. Write a program to print the first 30 odd and even numbers, also display sum of all even and odd numbers separately. (By using Loop)

Output:

Even numbers	Odd numbers
02	01
04	03
06	05
08	07
--	--

Sum: ---   ----

Q.No.2. Write a program that asks the user to enter **Basic pay** and print **pay-slip** of the Employee.

Output:

Please enter Basic pay?40000

Pay Slip

Basic pay   :40000
House Rent (40%)   :10160
Medical All ounce (18%)   :5000
Computer Allowance(15%) :5000

Total pay: : ----

Q.No.3. Write a program to print the following series. (By using Loop)

(i) 1   4   9   16   25   36   49 100

(ii) 1   8   27   64 1000

(iii) 3   6   10   15   21   28   36

Q.No.4. Write a program to calculate area of square.

Q.No.5. Write a program to calculate area of rectangle.

Q.No.6. Write a program to convert a given amount in notes/coins?

Example:

Enter any amount? 9897

Output:

1000	500	100	50	20	10	5	2	1
9	1	3	1	2	0	1	1	0

Q.No.7. Write a program to take input of Seat No, Subjects & Marks of a student & calculate the total & percentage, & display the output in table format.

Example:

MARKSHEET

Roll No	Subjects	Marks
2k18/CS/01	English	80
2k18/CS/01	Basic Electronics	60
2k18/CS/01	Mathematics	50
2k18/CS/01	Introduction to Computers	70
2k18/CS/01	Computer Language	50

Total Marks   : 310
Percentage %   : 62.00

Q.No.8. Write a program to calculate area of circle.

Q.No.9. Write a program to generate multiplication table. (By using Loop)

output:

Enter table no? 8

Start from? 2

Up to ? 7

Table-8

2 * 8 = 16
3 * 8 = 24
4 * 8 = 32
5 * 8 = 40
6 * 8 = 48
7 * 8 = 56

Sum: 27   48   216

Q.No.10. Write a program to convert a given Seconds into Hours, Minutes and Seconds?

Output:

Input Seconds? -----

Hours	Minutes	Seconds
---	----	----

Q.No.11. Write a Program to find the largest and smallest number from given 10 numbers.

Example:

  Enter any 10 integer numbers? 4   6   12 56   3   8   34 32   40   22
          Largest number   : 56
          Smallest number : 3

Q.No.12. Write a program that asks the user to enter two numbers, and prints the sum, product, difference, quotient and remainder of the two numbers.

Output:

          Please enter two numbers ? 9   4
          Sum of 9 and 4 is: 13
          Product of 9 and 4 is: 36
          Difference of 9 and 4 is: 05
          Quotient of 9 and 4 is: 02
          Remainder of 9 and 4 is: 01

          Total is: 57

Q.No.13. Write a program to convert binary number to octal number.

Output:

              Enter any binary number? 1 1 0 1 0 1 1 1
              Octal number is : 327

Q.No.14. Write a program to display following output: (By using Loop)

Example:

enter 1st number =1

enter last number=10

sum is: 1+2+3+4+5+6+7+8+9+10 = 55.

Q.No.15. Write a program to convert a given number of Days in terms of Years, Weeks and Days.

Q.No.16. Write a program that calculates the squares and cubes to print the output as under:
(By using Loop)

Output:

```
        Start from ------------------------------------? 3
        Up to ------------------------------------------? 7
            Number        Square      Cube
              3             09          27
              4             16          64
              5             25          125
              6             36          216
              7             49          343

            ==== =============================
        Sum:    25          135         775
```

Q.No.17. Write a program to find first Ten numbers Divisible by 5. (By using Loop)

Example:

        Output: 5   10   15   20   25   30   35   40   45   50

Q.No.18. Write a program to read two integers N1 and N2 and Swap their values.

Output: Enter value of N1 ? 72
            Enter value of N2 ?   38

                        Value of N1 is :   38
                        Value of N2 is : 72

Q.No.19. Write a program to convert decimal number into binary number?

Sample output:

        Enter any decimal number: 50

        Equivalent binary value of decimal number 50: 110010

Q.No.20. Write a program that inputs one five-digit number, separates the number into its individual digits and prints the digits separated from one another by three spaces and also print sum of five-digits?

Output:

        Please enter five-digit number ? 43215
        Separated from one another by three spaces: 4   3   2   1   5
        Sum of five digits: 15

Q.No.21. Write a program to print ASCII value of all characters.

Q.No.22. Write a program to reverse any number.

output:

        Enter any number? 3452

        Reverse of 3452 is: 2543

Q.No.23. Write a program to convert binary number to Hexadecimal number.

Output:

        Enter any binary number? 1 1 0 0 1 1 0 1 0 1

        Hexadecimal number is : 335

Q.No.24 Write a program to count the number of words, where a word is defined as any continuous sequence of non-whitespace character

Example:

input any string? "Laar Campus Badin "

output: The string has 3 words

Q.No.25 Write a Java program to add two binary numbers.

Input Data:

Input first binary number: 10

Input second binary number: 11

Expected Output

Sum of two binary numbers: 101

Q.No.26 Write a Java program to reverse your name.

Input a name: ------

Reverse name: ------

Q.No.27 Write a Java program to solve quadratic equations.

take your own suppositions

Q.No.28 Write a Java program to get a number from the user and print whether it is positive or negative.

Q.No.29 Write a Java program to find the number of days in a month.

Test Data
Input a month number: 2
Input a year: 2016
Expected Output :
February 2016 has 29 days

Q.No.30 Write a program in Java to make such a pattern like right angle triangle with number increased by 1.The pattern like :

```
1
2 3
4 5 6
7 8 9 10
```