Assignment 1

Date: 18/09/2020

Submission Date: 21/09/2020

1. Write a Java program to print 'Hello' on screen and then print your name on a separate line.

Expected Output:

Hello

Alexandra Abramov

2. Write a Java program to print the sum of two numbers.

Test Data: 74 + 36

3. Write a Java program to divide two numbers and print on the screen.

Test Data: 50/3 Expected Output: 16

4. Write a Java program to print the result of the following operations.

Test Data:

a. -5 + 8 * 6

b. (55+9) % 9

c. 20 + -3*5 / 8

d. 5 + 15 / 3 * 2 - 8 % 3

Expected Output:

43

1

19

13

5. Write a Java program that takes two numbers as input and display the product of two numbers.

Test Data:

Input first number: 25 Input second number: 5

Expected Output:

 $25 \times 5 = 125$

6. Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.

Test Data:

Input first number: 125 Input second number: 24

Expected Output:

125 + 24 = 149

125 - 24 = 101

 $125 \times 24 = 3000$

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125 / 24 = 5
125 mod 24 = 5
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7. Write a Java program that takes a number as input and prints its multiplication table upto 10.

Test Data:

Input a number: 8

Expected Output:

 $8 \times 1 = 8$

 $8 \times 2 = 16$

 $8 \times 3 = 24$

...

 $8 \times 10 = 80$

8. Write a Java program to display the following pattern.

Sample Pattern:

9. Write a Java program to compute the specified expressions and print the output.

Test Data:

((25.5 * 3.5 - 3.5 * 3.5) / (40.5 - 4.5))

Expected Output

2.138888888888889

10. Write a Java program to compute a specified formula.

Specified Formula:

$$4.0*(1-(1.0/3)+(1.0/5)-(1.0/7)+(1.0/9)-(1.0/11))$$

Expected Output

2.9760461760461765

11. Write a Java program to print the area and perimeter of a circle.

Test Data:

Radius = 7.5

Expected Output

Perimeter is = 47.12388980384689

Area is = 176.71458676442586

12. Write a Java program that takes three numbers as input to calculate and print the average of the numbers.

13. Write a Java program to print the area and perimeter of a rectangle.

Test Data:

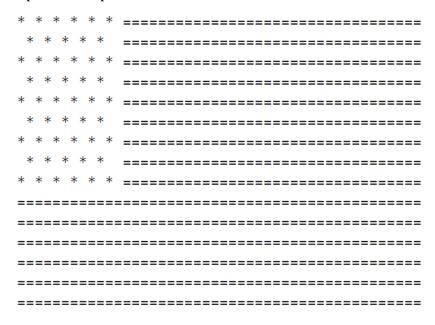
Width = 5.5 Height = 8.5

Expected Output

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Area is 5.6 * 8.5 = 47.60
Perimeter is 2 * (5.6 + 8.5) = 28.20
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14. Write a Java program to print an American flag on the screen.

Expected Output



15. Write a Java program to swap two variables.

16. Write a Java program to print a face.

Expected Output

17. 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

18. Write a Java program to multiply two binary numbers.

Input Data:

Input the first binary number: 10 Input the second binary number: 11

Expected Output

Product of two binary numbers: 110

19. Write a Java program to convert a decimal number to binary number.

Input Data:

Input a Decimal Number: 5

Expected Output

Binary number is: 101

20. Write a Java program to convert a decimal number to hexadecimal number.

Input Data:

Input a decimal number: 15

Expected Output

Hexadecimal number is: F

21. Write a Java program to convert a decimal number to octal number.

Input Data:

Input a Decimal Number: 15

Expected Output Octal number is: 17

22. Write a Java program to convert a binary number to decimal number.

Input Data:

Input a binary number: 100

Expected Output
Decimal Number: 4

23. Write a Java program to convert a binary number to hexadecimal number.

Input Data:

Input a Binary Number: 1101

Expected Output HexaDecimal value: D

24. Write a Java program to convert a binary number to a Octal number.

Input Data:

Input a Binary Number: 111

Expected Output Octal number: 7

25. Write a Java program to convert a octal number to a decimal number.

Input Data:

Input any octal number: 10

Expected Output

Equivalent decimal number: 8