**OBJECT ORIENTED PROGRAMMING**

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BSCS-NS-2A November 2, 2022

**Instruction:**

1. Copy the sample code exactly as it is.
2. The sample program will serve as a guide for you to create the following activities.
3. This activity can be done on any online platform.
4. Copy the source program and capture the output in the space provided.
5. In this activity, SOP code and JoptionPane will be used.
6. Write a Java program to divide two numbers and print on the screen.

Input Data: 50/3

Expected Output: 16

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| SOURCE CODE | Screen shot - OUTPUT |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 1  \*/  **SOP**  package oopass;  public class JavaApplication4 {  public static void main(String[] args)  {  System.out.println(50/3);  }  } |  |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 1  \*/  **JOptionPane**  package oopass;  import javax.swing.JOptionPane;  public class JavaApplication4 {  public static void main(String[] args)  {  JOptionPane.showMessageDialog(null, 50/3, "The Result", JOptionPane.INFORMATION\_MESSAGE);  }  } |  |

1. Write a JV program to print the result of the following operations.

Text, letter

Description automatically generatedTest Data:

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| SOURCE CODE | Screen shot - OUTPUT |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 1  \*/  **SOP**  package oopass;  public class JavaApplication4 {  public static void main(String[] args)  {  System.out.println(-5+8\*6);  System.out.println((55+9)%9);  System.out.println(20+-3\*5/8);  System.out.println(5+15/3\*2-8%3);  }  } |  |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 2  \*/  **JOptionPane**  package JavaApplication4;  import javax.swing.JOptionPane;  public class JavaApplication4 {  public static void main(String[] args) {  int p, e, a, n, u, t, h, y, r, o, k, l, m, v, c, q;  String x;    x = JOptionPane.showInputDialog("a.) -P + E \* A\nEnter value for P: ");  p = Integer.parseInt(x);  x = JOptionPane.showInputDialog("a.) -P + E \* A\nEnter value for E: ");  e = Integer.parseInt(x);  x = JOptionPane.showInputDialog("a.) -P + E \* A\nEnter value for A: ");  a = Integer.parseInt(x);  int pea = -p + e \* a;    x = JOptionPane.showInputDialog("b.) (N + U) % T\nEnter value for N: ");  n = Integer.parseInt(x);  x = JOptionPane.showInputDialog("b.) (N + U) % T\nEnter value for U: ");  u = Integer.parseInt(x);  x = JOptionPane.showInputDialog("b.) (N + U) % T\nEnter value for T: ");  t = Integer.parseInt(x);  int nut = (n + u) % t;    x = JOptionPane.showInputDialog("c.) H + (-Y \* R) / O\nEnter value for H: ");  h = Integer.parseInt(x);  x = JOptionPane.showInputDialog("c.) H + (-Y \* R) / O\nEnter value for Y: ");  y = Integer.parseInt(x);  x = JOptionPane.showInputDialog("c.) H + (-Y \* R) / O\nEnter value for R: ");  r = Integer.parseInt(x);  x = JOptionPane.showInputDialog("c.) H + (-Y \* R) / O\nEnter value for O: ");  o = Integer.parseInt(x);  int hyro = h + -y \* r /o;    x = JOptionPane.showInputDialog("d.) K + L / M \* V - C % Q\nEnter value for K: ");  k = Integer.parseInt(x);  x = JOptionPane.showInputDialog("d.) K + L / M \* V - C % Q\nEnter value for L: ");  l = Integer.parseInt(x);  x = JOptionPane.showInputDialog("d.) K + L / M \* V - C % Q\nEnter value for M: ");  m = Integer.parseInt(x);  x = JOptionPane.showInputDialog("d.) K + L / M \* V - C % Q\nEnter value for V: ");  v = Integer.parseInt(x);  x = JOptionPane.showInputDialog("d.) K + L / M \* V - C % Q\nEnter value for C: ");  c = Integer.parseInt(x);  x = JOptionPane.showInputDialog("d.) K + L / M \* V - C % Q\nEnter value for Q: ");  q = Integer.parseInt(x);  int klmvcq = k + l / m \* v - c %q;    JOptionPane.showMessageDialog(null, "ANSWERS:\na.) " + pea + "\nb.) " + nut + "\nc.) " + hyro + "\nd.) " + klmvcq);  }  } |  |

1. Write a Java Program to divide two numbers and print on the screen.

Input Data: 220 \* 2

Expected Output: 440

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| SOURCE CODE | Screen shot - OUTPUT | |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 3  \*/  SOP  public class JavaApplication4 {  public static void main(String[] args)  {  System.out.println(220\*2);  }  } |  | |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 3  \*/  **JOptionPane**  package JavaApplication4;  import javax.swing.JOptionPane;  public class JavaApplication4 {  public static void main(String[] args)  {  JOptionPane.showMessageDialog(null, 220\*2, "The Result", JOptionPane.INFORMATION\_MESSAGE);  }  } | |  |

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

Input Data:

Input first number: 25

Input second number: 5

25 x 5 = 125

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| SOURCE CODE | Screen shot - OUTPUT |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 4  \*/  **SOP**  package JavaApplication4;  import java.util.Scanner;  public class JavaApplication4 {  public static void main(String[] args)  {  Scanner sc = new Scanner (System.in);  System.out.println("Input first number: ");  int y1 = sc.nextInt();    System.out.println("Input second number: ");  int y2 = sc.nextInt();  System.out.println("Sum = " + y1 + " + " + y2 + " = " + (y1 + y2));  System.out.println("Difference = " +y1 + " - " + y2 + " = " + (y1 - y2));  System.out.println("Product = "+ y1 + " x " + y2 + " = " + (y1 \* y2));  System.out.println("Quotient = " + y1 + " / " + y2 + " = " + (y1 / y2));  System.out.println("Remainder of two numbers: "+ y1 + " mod " + y2 + " = " + (y1 % n2));  }  } |  |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 4  \*/  **JOptionPane**  package JavaApplication4;  import javax.swing.JOptionPane;  public class JavaApplication4 {  public static void main(String[] args)  {  String x = JOptionPane.showInputDialog("Input first number : ");  String y = JOptionPane.showInputDialog("Input second number : ");    int a = Integer.parseInt(x);  int b = Integer.parseInt(y);    JOptionPane.showMessageDialog(null, "The Product of "+ a + " x " + b + " = " + (a \* b), "Product of Two Integers",  JOptionPane.INFORMATION\_MESSAGE);  }  } |  |

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

Text

Description automatically generated

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| SOURCE CODE | Screen shot - OUTPUT |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 5  \*/  **SOP**  package JavaApplication4;  import java.util.Scanner;  public class JavaApplication4 {  public static void main(String[] args)  {  Scanner sc = new Scanner (System.in);  System.out.println("Input first number: ");  int y1 = sc.nextInt();    System.out.println("Input second number: ");  int y2 = sc.nextInt();  System.out.println("Sum = " + y1 + " + " + y2 + " = " + (y1 + y2));  System.out.println("Difference = " +y1 + " - " + y2 + " = " + (y1 - y2));  System.out.println("Product = "+ y1 + " x " + y2 + " = " + (y1 \* y2));  System.out.println("Quotient = " + y1 + " / " + y2 + " = " + (y1 / y2));  System.out.println("Remainder of two numbers: "+ y1 + " mod " + y2 + " = " + (y1 % y2));  }  } |  |
| package javaapplication4;  /\*\*  \*  \* @author Nathaly Pearl Salanatin  \* Number 5  \*/  **JOptionPane**  package JavaApplication4;  import javax.swing.JOptionPane;  public class JavaApplication4 {  public static void main(String[] args)  {  String x = JOptionPane.showInputDialog("Input first number : ");  String y = JOptionPane.showInputDialog("Input second number : ");    int a = Integer.parseInt(x);  int b = Integer.parseInt(y);    int sum = (a+b);  int difference = (a-b);  int product = (a\*b);  int quotient = (a/b);  int remainder = (a%b);    JOptionPane.showMessageDialog(null, "The Sum : " + sum + "\n"  + "The Difference : " + difference + "\n"  + "The Product : " + product + "\n"  + "The Quotient : " + quotient + "\n"  + "The Remainder of Two Numbers : " + remainder, "The Results", JOptionPane.INFORMATION\_MESSAGE);    }  } |  |