**ICT 131 : Introductory Programming and Object- Oriented Concepts Using Java**

**Tutor-Marked Assignment**

**Question 1(a):**

import java.util.Scanner;

public class Question1\_a

{

public static void main(String args[])

{

System.out.println("Student name: Wang Yuet Hua Jennifer");

System.out.println("Student number: B1571734");

int output;

Scanner input1 = new Scanner(System.in);

int num1 = input1.nextInt();

int x1 = num1 / 100;

int x2 = (num1 % 100)/10;

int x3 = num1 % 10;

System.out.println(x1 + " " + x2 + " " + x3);

Scanner input2 = new Scanner(System.in);

int num2 = input2.nextInt();

int y1 = num2 / 100;

int y2 = (num2 % 100)/10;

int y3 = num2 % 10;

System.out.println("- " + y1 + " " + y2 + " " + y3);

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

output = num1 - num2;

int o1 = output / 100;

int o2 = (output % 100)/10;

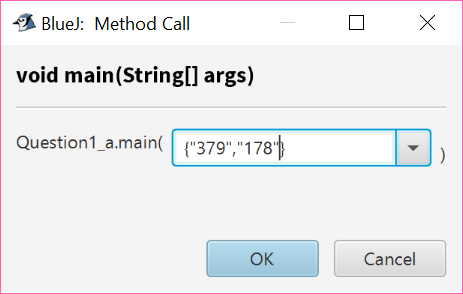
int o3 = output % 10;

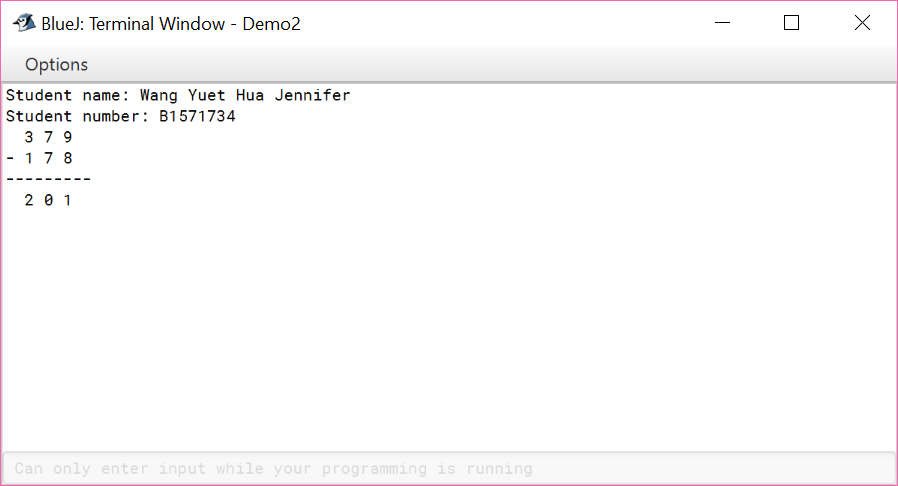
System.out.println(o1 + " " + o2 + " " + o3);

}

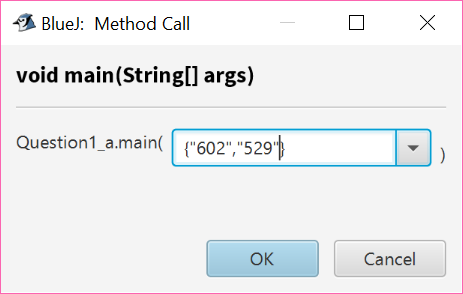
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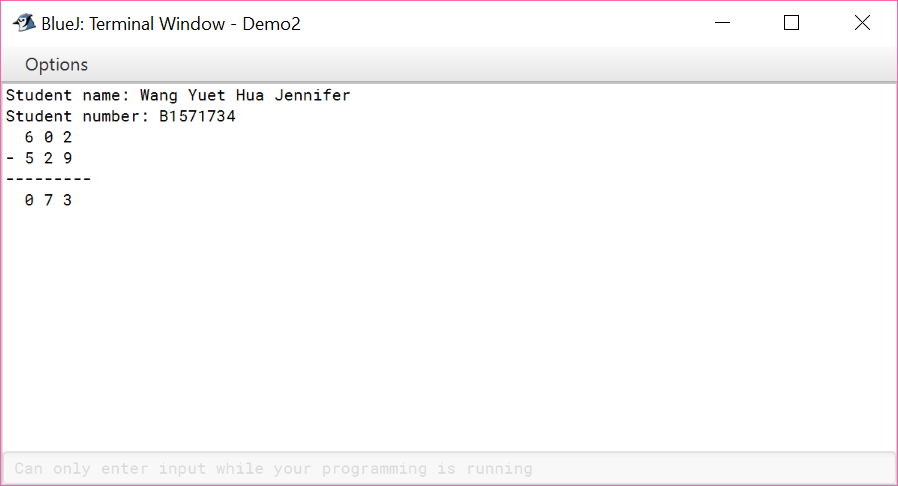
**Screenshot 1:**



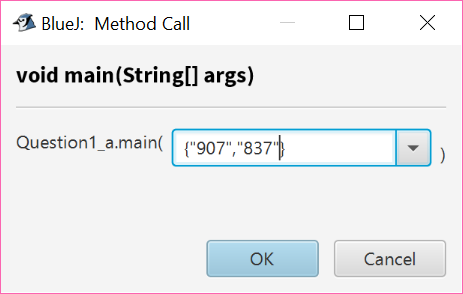


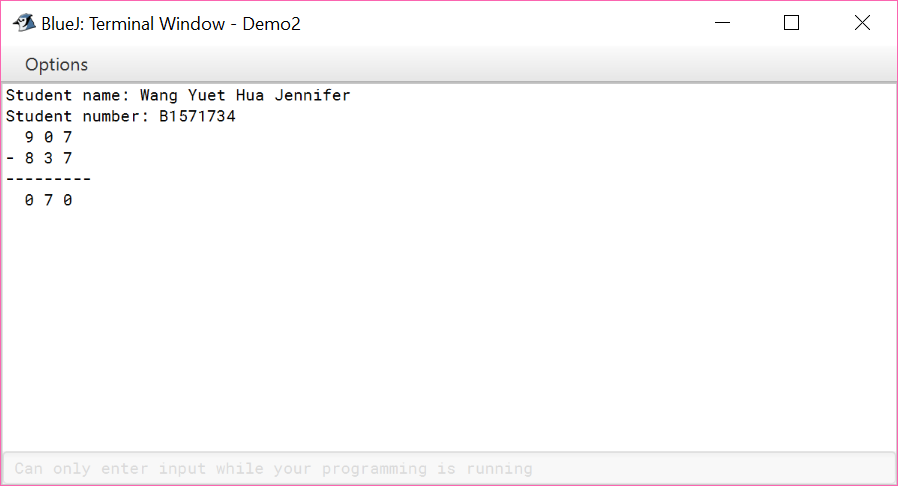
**Screenshot 2:**





**Screenshot 3:**





**Question 1(b):**

import java.util.Scanner;

public class Question1\_b

{

public static void main (String [] args)

{

Scanner input1 = new Scanner (System.in);

int choice = 0;

System.out.println("Choose the type of monthly pass");

System.out.println("1 - Primary Student");

System.out.println("2 - Secondary Student");

System.out.println("3 - Polytechnic Student");

System.out.println("4 - University Student");

System.out.println("5 - Full-Time National Serviceman");

System.out.println("6 - Adult");

System.out.println("7 - Senior Citizen");

System.out.println("8 - Person with Disability");

System.out.print("Your choice: ");

choice = input1.nextInt();

if (choice == 0)

{

System.out.println("Invalid type of person");

}

else

{

switch (choice)

{

case 1: case 2: case 3: case 4: case 5:

System.out.println("Enter the type of monthly pass");

System.out.println("B - Bus");

System.out.println("T- Train");

System.out.println("H - Hybrid (Bus and Train)");

Scanner input2 = new Scanner (System.in);

System.out.print("Your choice: ");

String mthpasschoice = input2.nextLine();

if (mthpasschoice.equalsIgnoreCase("B") && choice==1)

{

System.out.print("Cost of pass = $22.50");

}

if (mthpasschoice.equalsIgnoreCase("T") && choice==1)

{

System.out.print("Cost of pass = $20.00");

}

if (mthpasschoice.equalsIgnoreCase("H") && choice==1)

{

System.out.print("Cost of pass = $41.00");

}

if (mthpasschoice.equalsIgnoreCase("B") && choice==2)

{

System.out.print("Cost of pass = $27.50");

}

if (mthpasschoice.equalsIgnoreCase("T") && choice==2)

{

System.out.print("Cost of pass = $25.00");

}

if (mthpasschoice.equalsIgnoreCase("H") && choice==2)

{

System.out.print("Cost of pass = $51.00");

}

if (mthpasschoice.equalsIgnoreCase("B") && choice==3)

{

System.out.print("Cost of pass = $27.50");

}

if (mthpasschoice.equalsIgnoreCase("T") && choice==3)

{

System.out.print("Cost of pass = $25.00");

}

if (mthpasschoice.equalsIgnoreCase("H") && choice==3)

{

System.out.print("Cost of pass = $51.00");

}

if (mthpasschoice.equalsIgnoreCase("B") && choice==4)

{

System.out.print("Cost of pass = $52.00");

}

if (mthpasschoice.equalsIgnoreCase("T") && choice==4)

{

System.out.print("Cost of pass = $45.00");

}

if (mthpasschoice.equalsIgnoreCase("H") && choice==4)

{

System.out.print("Cost of pass = $85.00");

}

if (mthpasschoice.equalsIgnoreCase("B") && choice==5)

{

System.out.print("Cost of pass = $52.00");

}

if (mthpasschoice.equalsIgnoreCase("T") && choice==5)

{

System.out.print("Cost of pass = $45.00");

}

if (mthpasschoice.equalsIgnoreCase("H") && choice==5)

{

System.out.print("Cost of pass = $85.00");

}

else

{

System.out.print("Invalid type of pass");

}

}

if (choice==6)

{

System.out.print("Cost of pass = $120.00");

}

if (choice==7 || choice==8)

{

System.out.print("Cost of pass = $60.00");

}

}

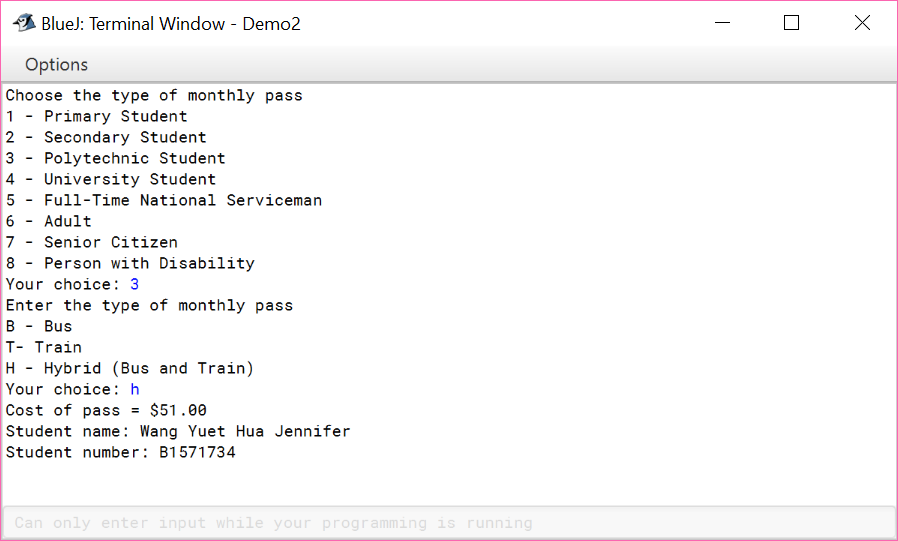
System.out.println("\nStudent name: Wang Yuet Hua Jennifer");

System.out.println("Student number: B1571734");

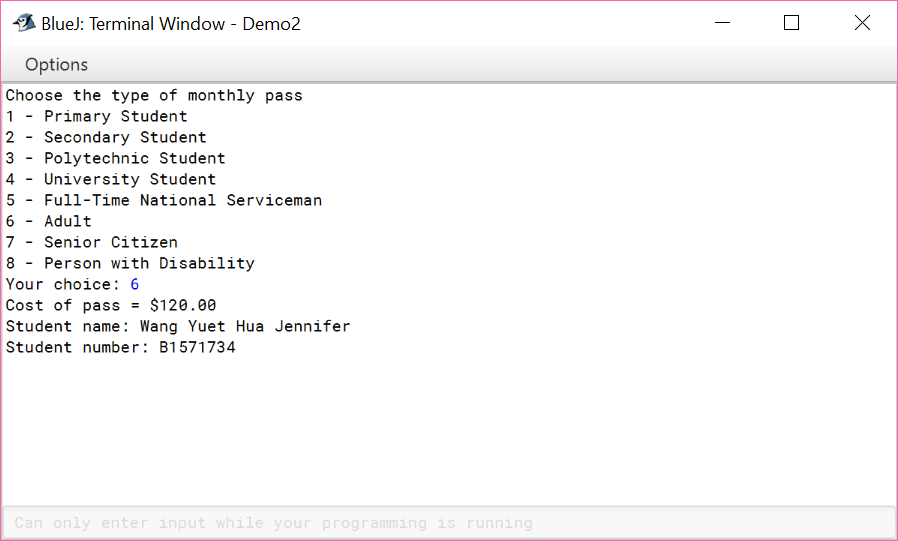
}

}

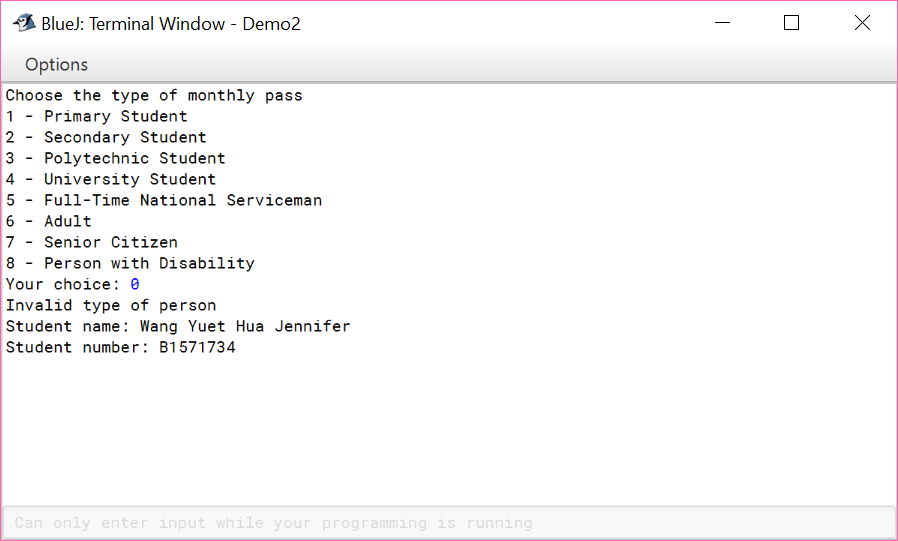
**Screenshot 1:**



**Screenshot 2:**



**Screenshot 3:**



**Screenshot 4:**

