**Revision**

**Question 1**

Design a ticketing system for a piano recital. There are two dates for the recital (5th November and 6th November 2022). The price for the tickets is RM10 for 5th November and RM15 for 6th November. For both dates you can choose either premier seats or normal seats. An extra RM5 will be added for the premier seats and RM0.50 for normal seats. Ensure that your program has the required features listed below:

1. Able to get proper input from the users.
2. Three separate functions, one is the main function, one more is for calculation and the last one is for display of results. Please try to use pass by value or reference when passing values in a function.
3. Update your code so that your customers can by at least one ticket or maximum 10 tickets

Question 2

1. Develop a simple object oriented program.
2. Complete the program for Student class.
   1. Create a **Student** class based on the private data members listed in Table 1.

**Table 1**

|  |
| --- |
| Student |
| -name :String |
| -id:int |
| -course:String |

1. Write a constructor that accepts three arguments to initialize a Student object.
2. Write suitable accessor methods for the three private variables declared in (i).

1. A new class called **UndergradStudent** will inherit from the **class Student**.
   1. Create the class **UndergradStudent** and this class inherits from the Student class.
   2. The **UndergradStudent** has only one private member variable called ***personal\_tutor.*** The ***personal\_tutor*** variable stored the name of the tutor for the undergraduate student.
   3. Write a constructor code that accepts the name of the student, id, course and the personal tutor’s name.
   4. Write an accessor method that can return the name of the tutor.

1. Write a driver program called **StudentMain** that can produce an output similar to the sample shown below.

**Student name: Mike**

**Student id: 123**

**Student course: Computing**

**Personal Tutor: Dr Who**