seconds.

Implement a method called InputAlarm() which will input the three numbers from the keyboard and store those as the properties.

Use a Try Catch statement to prevent non-numerical values from being entered.

Throw and catch a user-defined exception for the following errors

- Hour (should be between 0 to 12)
- Minute, Second should be between (0 to 59)

Add the following methods.

- **ShowAlarm()** which should display the Alarm that has been set.
- **SetAlarm()** – To assign Hour, Minute, and Second to the properties. The above validations for Hour, Minute, and Second should be checked using if statements. If incorrect the value zero should be stored for the parameter.

Create the **MainApp** class which contains the **main()** method. Perform the following within the main() method.

- Create 2 instances of the **AlarmClock** class.
- Use the **InputAlarm()** method to assign one of the Alarms, and set the second Alarm using the SetAlarm() method.
- Use an ArrayList and store both AlarmClock objects in the ArrayList
- Iterate through the ArrayList and display the two Alarms that were set.

- Include a method called **void Print()** to display the properties.

Extend the **Employee** class and make a class called **Manager** to represent the details of a Manager

- Include the following ***data members*** in the Manager class.

  Department, ProductNo1, ProductNo2, ProductNo3 (ProductNos are integers, Department is a string)

- Your class should have a constructor that initializes all instance variables.
- Include a method called void **Read()** which will input the above values from the keyboard, and call the Employee class Read() method to input the EmpId, name, and address as well.
- Use a **Try Catch** in the Read() method to validate the entry of numbers for the three ProductNos.
- Include a method called **void Print()** to display the Manager details, and call the Employee class Print() method as well to display Employee details.

Answer:

Finish attempt ...

Hour, Minute, Second

This class should have a constructor that initializes the three instance variables to 12 hours, 0 minutes, and 0 seconds.

Implement a method called **InputAlarm()** which will input the three numbers from the keyboard and store those as the properties.

Use a Try Catch statement to prevent non-numerical values from being entered.

Throw and catch a user-defined exception for the following errors

- Hour (should be between 0 to 12)
- Minute, Second should be between (0 to 59)

Add the following methods.

- **ShowAlarm()** which should display the Alarm that has been set.
- **SetAlarm()** – To assign Hour, Minute, and Second to the properties. The above validations for Hour, Minute, and Second should be checked using if statements. If incorrect the value zero should be stored for the parameter.

Create the **MainApp** class which contains the **main()** method. Perform the following within the main() method.

- Create 2 instances of the **AlarmClock** class.
- Use the **InputAlarm()** method to assign one of the Alarms, and set the second Alarm using the SetAlarm() method.
- Use an ArrayList and store both AlarmClock objects in the ArrayList

Version A

Write a Lottery class that simulates a lottery.

The class should have an array of five integers named **lotteryNumbers.**

The constructor should use the random() function to generate a random number in the range of 0 through 9 for each element in the array.

The class should also have a function that accepts an array of five integers that represent a person's lottery picks. This method is to compare the corresponding elements in the two arrays and return the number of digits that match.

For example, the following shows the lotteryNumbers array and the user's array with sample numbers stored in each.

Sample Output:

User's Numbers: 4 2 9 7 3

Lottery Numbers: 7 4 9 1 3

Number of matching digits: 2

Matching digits: 2, 4

Answer:

Version E

Write a class to create a new exception, called ***InvalidITNumberException.***

This should print out the error message ***"Invalid IT number"*** if the IT number is not according to the correct format.

The valid IT number starts with the characters "**IT**" and followed **8 numbers**.

Write another class called **student** that holds ***StudentId*** and ***StudentName*** which can be assigned through the constructor.

It also should have a method called ***display()*** which prints the StudentId and StudentName.

If the studentID is in incorrect format, the *display()* method should have proper try-catch statements to handle the exception.

Create a class call *demo* with the main method to test the program.

Answer:

Version E

Write a class to create a new exception, called ***InvalidITNumberException.***

This should print out the error message ***"Invalid IT number"*** if the IT number is not according to the correct format.

The valid IT number starts with the characters "**IT**" and followed **8 numbers**.

Write another class called **student** that holds ***StudentId*** and ***StudentName*** which can be assigned through the constructor.

It also should have a method called ***display()*** which prints the StudentId and StudentName.

If the studentID is in incorrect format, the *display()* method should have proper try-catch statements to handle the exception.

Create a class call *demo* with the main method to test the program.

Answer:

Version C

Implement a class named **RandNum**. The class should have a 5x5 2D array of 25 integers. The constructor should use the **random()** function to generate a random number in the range of 1 to 100 for each element in the array.

Implement a method(s) to calculate the **minimum, maximum, and average** of the 25 values.

Implement a method to display the values called **display()** of the array, minimum, maximum, and average of the 25 values.

Answer:

Finish attempt ...

Question 1

Not yet answered

Marked out of 10.00

Flag question

Version F

Create a class called **AlarmClock**. The class should keep the following attributes:

Hour, Minute, Second

This class should have a constructor that initializes the three instance variables to 12 hours, 0 minutes, and 0 seconds.

Implement a method called **InputAlarm()** which will input the three numbers from the keyboard and store those as the properties.

Use a Try Catch statement to prevent non-numerical values from being entered.

Throw and catch a user-defined exception for the following errors

- Hour (should be between 0 to 12)
- Minute, Second should be between (0 to 59)

Add the following methods.

- **ShowAlarm()** which should display the Alarm that has been set.
- **SetAlarm()** – To assign Hour, Minute, and Second to the properties. The above validations for Hour, Minute, and Second should be checked using if statements. If incorrect the value zero should be stored for the parameter.

Create the **MainApp** class which contains the **main()** method. Perform the following within the main() method.

- Create 2 instances of the **AlarmClock** class.
- Use the **InputAlarm()** method to assign one of the Alarms, and set the second Alarm using the SetAlarm() method

Question 1

Not yet answered

Marked out of 10.00

Flag question

Version G

You have been asked to develop a simple system to handle Employees in a Company.

Create a class called **Employee** to represent the details of an Employee.

- Include the following ***data members*** in the Employee class.

  EmpId, name, address (all are string data)
- Your class should have a constructor that initializes all instance variables.
- Include a method called **void Read()** which will input the above values from the keyboard
- Include a method called **void Print()** to display the properties.

Extend the **Employee** class and make a class called **Manager** to represent the details of a Manager

- Include the following ***data members*** in the Manager class.

  Department, ProductNo1, ProductNo2, ProductNo3 (ProductNos are integers, Department is a string)
- Your class should have a constructor that initializes all instance variables.
- Include a method called void **Read()** which will input the above values from the keyboard, and call the Employee class Read() method to input the EmpId, name, and address as well.
- Use a **Try Catch** in the Read() method to validate the entry of numbers for the three ProductNos.

Quiz navigation

Finish attempt ...

Time left **0:44:36**

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