Q 2J. The IT Department has asked for your help to develop an application to generate temporary passwords for the employees' accounts. The application prompts the user to enter an employee's full name in the following format "forename surname". Next, the application uses the given full name to create the corresponding password. The password is created using the following rules:

- Each lower case vowel is replaced by its upper case version
- A space is replaced by a '&'
- The password ends with the number of characters in the initial text (which includes the space), followed by a percentage character (i.e. '%') and then by the second letter of the initial text

1. Develop an **instantiable class** for this application which contains:

      A class definition
      Suitable data members (instance variables)
      A constructor
      A setter method to set the text given by the user
      A compute method to create the temporary password
      A getter method to return the password

Name the instantiable class **TemporaryPassword**.

For example, if the instantiable class receives:

- The full name "JOHN doe" then the compute method should create the password "JOHN&dOE8%O"
- The full name "michAel Smith" then the compute method should create the password "mIchAEl&SmIth13%i"

2. **Develop an application** that uses the instantiable class *TemporaryPassword* class (the instantiable class previously developed) to create a password. The application will display the password on the screen. In the application class, please add a short comment for each method of the *TemporaryPassword* class that you use/call in your application to explain why that method is needed.
Name the application class **TemporaryPasswordApp**.