Write a fragment of code using (if) or (if ... else) statements to do the following:

* tests the value of the char variable *response* and performs the following actions:

1. If response is ‘y’, the message “Your request is being processed” is printed.
2. If response is ‘n’, the message “Thank you anyway for your consideration” is printed.
3. For any other value of response, the message “Invalid entry; please try again” is printed

* convert a number *grade* into an equivalent letter
  1. ‘A’ for *grade* more than or equal to 90
  2. ‘B’ for *grade* more than or equal to 80
  3. ‘C’ for *grade* more than or equal to 70
  4. ‘D’ for *grade* more than or equal to 60
  5. ‘F’ for *grade* more than or equal to 90
* Change the value of the variable x if it is negative to positive value
* asks the user to enter two integers, then prints the larger number followed by the words "is larger." If the numbers are equal, print the message "These numbers are equal."
* Implement the following decision table for (The National Earthquake Information Center) to characterize an earthquake based on its Richter scale number.

Richter Scale Number (n) Characterization

Less than 5.0 Little or no damage

Between 5.0 and 5.5 Some damage

Between 5.5 and 6.5 serious damage

Between 6.5 and 7.5 Disaster

Higher Catastrophe

**Write a C++ program** that ask the user to enter his last 4 water bills .

The program should find and output their average monthly water bill.

1. If the average bill exceeds $75, the output should include a message indicating that too much water is being used.
2. If the average bill is at least $25 but no more than $75, the output should indicate that a typical amount of water is being used.
3. if the average bill is less than $25, the output should contain a message praising the user for conserving water.

**Use the sample output below as a model for your output.**

***Sample Run 1:***

Please input your water bill 1:

300

Please input your water bill 2:

200

Please input your water bill 3:

225

Please input your water bill 4:

275

Your average monthly bill is $83.33. You are using excessive amounts of water

***Sample Run 2:***

Please input your water bill 1:

100

Please input your water bill 2:

150

Please input your water bill 3:

75

Please input your water bill 4:

125

Your average monthly bill is $37.50. You are using a typical amount of water