CSCI-14 Assignment #4, if/else programming (40 points) – due 10/3/22

Write a C++ program that prompts for a single character **(NOT a string!)** then echo-prints the input, and either the corresponding digit on the telephone dial, if it exists, or a message stating that the character does not correspond to a digit on the dial. Use the following grouping for the letters and digits on the dial:

2 = ABC	3 = DEF	4 = GHI	5 = JKL
6 = MNO	7 = PRS	8 = TUV	9 = WXY

Note that there are no corresponding digits for Q or Z, and that there are no lower-case letters or non-alphabetic characters on the standard telephone dial. We're not using a modern text-messaging cell phone here; we're talking about the old-style telephone dial. Therefore, for Q or Z, your program should report that there is no corresponding digit; and for any lower-case letter or for any non-alphabetic character your program should print a general "that's not a capital letter" message.

Use good programming style with meaningful identifier names, careful and consistent indentation, and appropriate comments. Your major code structure must be a cascaded if-else structure, not a series of independent if statements. Notice that much of the output will be essentially the same for the digits on the dial. **Do not repeat a message like "The letter X corresponds to the digit Y on the keyboard", with different values of X and Y, in several places in the code.** Instead, use a **single** output statement with string literals for the unchanging text for the letter-and-corresponding-digit message, and use variables to hold the changing values to print. **You MAY NOT use a switch() statement for this:** you MUST use cascaded if/else structures (nested will work, but they are poor style for this). It will require several structures, possibly nested.

Some example runs:

```
Enter a single letter and I will tell you the digit
it corresponds to on the telephone dial:
A
The character A corresponds to the digit 2 on the dial.

Enter a single letter and I will tell you the digit
it corresponds to on the telephone dial:
Q
Q doesn't correspond to any digit on the dial.

Enter a single letter and I will tell you the digit
it corresponds to on the telephone dial:
a
The character a is not a capital letter.

Enter a single letter and I will tell you the digit
it corresponds to on the telephone dial:
^
The character ^ is not a capital letter.
```

Test your program with at least one letter from each group, Q, Z, and several other characters. Again, only code and print the text for any message in a single place – **do not repeat similar messages.**