Write a C++ program that accepts a number followed by a letter as shown in the figure. If the letter following the number is 'c', the program should take the number entered as a temperature in degrees Fahrenheit, convert the number to the equivalent degrees Celsius, and display a suitable message. If the letter following the number is 'f', the program should take the number entered as a temperature in degrees Celsius, convert the number to the equivalent degrees Fahrenheit and display a suitable message. If the letter is neither f nor c, the program is to display a message that the data entered is incorrect. Use the following relationship.

Celsius = $(5.0 / 9.0) \times (Fahrenheit - 32.0)$ Fahrenheit = $(9.0 / 5.0) \times Celsius + 32.0$

Use switch statements for your program

```
Enter a number and a letter
98 c
36.6667
```

Hint: Take two inputs in parallel when considering 'number followed by a letter'