

Write a C++ program that computes an electric bill given the kilowatt hours used.

Use the following facts:

1. electricity costs 61 cents per kilowatt hour
2. the county requires a 9.5% surcharge be paid on the cost of electricity used
3. the city imposes a 3.25% utility tax on the cost of electricity used
4. the state charges all power company customers a flat fee of \$4.50

Use named constants where applicable (i.e. fixed values should be made constants).

Since we have not yet covered input statements, the program should not attempt to read the number of kilowatt hours used. Instead, declare a named constant (KWHRS) for kilowatt hours used.

Output for the program must be in the form of a bill that indicates how many kilowatt hours were used, itemizes each charge, and then displays the total amount due. All values must be labeled. The numeric values should be displayed using the system's default precision (since we have not discussed how to control the format of a number), therefore, the numbers need not be aligned (justified).

Example:

If the kilowatt hours used is 50.0, then your output will look something like—

The bill for 50 kilowatt hours of electricity is	
Electricity used:	30.5
County surcharge:	2.8975
City utility tax:	0.99125
State fees:	4.5
Total due:	38.8887

Handwritten notes:
KWHRS * cost(1)
* county Tax (2)
* city Tax (3)
== state Tax (4)
add all

You will run the program twice. The first time, set KWHRS = 100.0. For the second run, the number of kilowatt hours used is 265.2 and the city has just changed its tax rate to 3.4%. Make the appropriate changes to your constants, recompile, and run the program.

MINIMUM PROGRAM DOCUMENTATION REQUIRED.