

SELECTIVE PROCESSING PROBLEMS:

1. Write a program which will accept as input a persons shoe size and then make a comment depending on the size. Use the following three size categories:
 - a) size 4 and under
 - b) between 5 and 9
 - c) greater than 9
2. Write a program which will accept 4 marks and determine the average. Once the average is determined the program should display either "You have a passing grade" or "Sorry you have a failing grade"
3. Write a program which accepts a mark and then determines the letter grade to assign it. Letter grades are assigned as follows:

0 <= mark < 50 F
50 <= mark < 60 D
60 <= mark < 70 C
70 <= mark < 80 B
80 <= mark < 100 A

4. A gas company measures the amount of gas its customers use in hundreds of cubic feet (ccf) and charges them according to the following schedule:

first 8 ccf	50 cents each
more than 8 ccf	30 cents each

Note that the 30 cent rate applies only to usage above 8 ccf. A customer who uses 10 ccf is charged 50 cents for the first 8 ccf and 30 cents for the next 2 ccf. Write a program to calculate customer's bills.

5. Assume that the cost, not including tax, for sending a telegram from Hamilton to Montreal is \$4.50 for the first twenty words or less, plus \$.17 for each additional word beyond twenty. Write a program which accepts the number of words and then determines the total cost.
6. An electric company measures the amount of electricity its customer use in kilowatt hours (kwh) and charges them according to the following schedule:

first 12 kwh or less	\$2.80
next 78 kwh	8 cents each kwh
excess above 90 kwh	6 cents each kwh

Note that the minimum bill is \$2.80. Write a program to calculate a customers bill.

7. Write a program which determines the amount of Federal Income Tax one owes when given the taxable income. Federal tax is determined as follows:

Taxable Income	Tax
\$1295 or less	6%
greater than 1295 and less than or equal to 2590	\$78 + 16% on next 1295
greater than 2590 and less than or equal to 5180	\$285 + 17% on next 2590
greater than 5180 and less than or equal to 7770	\$725 + 18% on next 2590
greater than 7770 and less than or equal to 12950	\$1191 + 19% on next 5180
greater than 12950 and less than or equal to 18130	\$2176 + 20% on next 5180
greater than 18130 and less than or equal to 23310	\$3212 + 23% on next 5180
greater than 23310 and less than or equal to 36260	\$4403 + 25% on next 12950
greater than 36260 and less than or equal to 62160	\$7641 + 30% on next 25900
greater than 62160	\$15411 + 34% on remainder