Selection Control Statements

Selection Control Statements: Sample Program List

determine_pass_fail.py

This program illustrates the most basic form of if-then-else statement. The program inputs the test score and displays the result (pass/fail). Test score above 70 is pass.

determine_pass_fail_2.py

The second version of determine_pass_fail.py that takes the student's age into consideration when determining the pass/fail result. The program illustrates the use of nested if statements.

compute_recommended_weight.py

This program illustrates the use of boolean functions and the basic if-else statement for computing the recommended weight given the person's age and height.

compute_total_wage.py

This program computes the total wage as the sum of base salary and commission. The if-else and if-elif-else statements are used in the functions for computing the salary and commission.

leap_year.py

The leap year can be determined as follows:

- 1. divisible by 4 but not by 100 (1796 is leap, but 1800 is not) (divisible by 100 is a century year 1600, 1700, 1800, etc)
- 2. divisible by both 4 and 100 and also by 400 (2000 is leap)

This programs shows how the leap year determination can be implemented in seven different ways (uses seven different styles of if statements).