DUBLIN Institute of Technology Tallaght Institution Teicneolajochta Tamhlacht

Software Development Fundamentals

Lab 1

Use template provided for solutions.

Write the pseudo-code solutions for the following problems:

- 1. Input three whole numbers and output the average of the three numbers.
- 2. Write the pseudo-code that inputs a person's weight (in pounds) and displays(outputs) the number of calories that person needs in one day. A person needs 19 calories per pound of body weight.
- 3. When you say that you are 18 years old, you are really saying that the Earth has circled the Sun 18 times. Since other planets take fewer or more days than Earth to travel around the Sun, your age would be different on other planets. You can compute how old you are on other planets by the formula

$$y = (x * 365) / d$$
 (" *" denotes multiplication, "/" division) where x is the age on Earth , y is the age on planet Y and d is the number of Earth days the planet Y takes to travel around the Sun.

Write the pseudo-code that inputs the user's Earth age and displays(outputs) his or her age on Mercury, Venus, Jupiter and Saturn. The values for *d* are listed in the table below:

d = Approximate Number of Earth days for this

Planet	planet to travel around the Sun
Mercury	88
Venus	225
Jupiter	4,380
Saturn	10,767