

AMA2222 Lab2 (week 2)

2a)

In Hong Kong, employees are required to contribute to the Mandatory Provident Fund scheme (MPF). The amount depends on monthly relevant income. Refer to the table below:

Monthly relevant income	Less than \$7,100	\$7,100 to \$30,000	\$30,000 or above
Employee's contributions	Not required	Relevant income \times 5%	\$1,500

Write a program that ask an employee to enter his/her monthly salary and computes the required amount of contribution. Assume the salary is an integer amount. The contribution amount is rounded up to the nearest 5 cents (\$0.05).

Sample 1:

Please enter your monthly salary (\$): 6000

You are not required to contribute.

Sample 2:

Please enter your monthly salary (\$): 14000

You need to contribute \$700.

Sample 3:

Please enter your monthly salary (\$): 50000

You have reached the maximum contribution of \$1500.

2b)

The three sides of a triangle satisfy triangle inequality. That is, the sum of length of any two sides should be strictly greater than the remaining side. Write a program that reads three lengths and judge whether they can form a triangle or not. You should also indicate if the triangle is an isosceles triangle or an equilateral triangle. Assume the input values are positive float values.

Sample 1:

Please enter three lengths: 3 6 1.5

They cannot form a triangle.

Sample 2:

Please enter three lengths: 3 6 4

They can form a triangle.

Sample 3:

Please enter three lengths: 3 3 4

They can form an isosceles triangle.

Sample 4:

Please enter three lengths: 3 3 3

They can form an equilateral triangle.