**Q.1 Currency converter**

X, a currency conversion agent, serves his customers in exchanging currencies from Indian rupee to US Dollar. Deign an algorithm and write a Python program to automate the process of finding the equivalent amount in US Dollar.

**Input Format:**

Indian rupee equivalent to one US Dollar

Amount to be converted in Indian rupees

**Output Format:**

Dollar equivalent for Indian money

Q.2

**Relay Race**

In a ultra race, four runners are there and each of them cover equal distance. Given the total distance to be covered by the runners, design an algorithm and write a Python code to determine the Km and meter of distance to be covered by each runner? For example, if the total distance to be covered is 2 Km and 500 m then the distance to be covered by each runner is 0Km and 625 m.

**Input Format:**

Read Km of total distance to be covered

Read meter of total distance to be covered

**Output Format:**

Print Km of distance to be covered by each runner

Print meter of distance to be covered by each runner

Q.3

Length of diagonal in Rectangle

The perimeter of a rectangle is 46cm. If the length of the rectangle is 15cm, then what is the length of the diagonal of the rectangle? (Hint: use Pythagorus theorem to solve).

Input Format

Perimeter of rectangle

length of rectangle

Output format

length of diagonal

Q.4

**BMI Calculator**

A person from USA wants to know his Body Mass Index (BMI). He knows his weight in pounds and height in inches. The evaluator knows the formula for calculating BMI using the formula,

BMI = (weight in kilograms) / (height in m \* height in m)

Help the person in finding his BMI by writing a program for him. (Use the conversion formulae: 1 pound =0.4536 kilograms, 1 inch = 2.54 cms)

**Input Format:**

Weight of person in pounds.

Height of the person in inches.

**Output Format:**

BMI of the person calculated using the formula,

(weight in kilograms) / (height in m \* height in m)

Q.5

A company wants its employees to work for 'X' hours on average per day in a week (Monday to Friday). Given the number of hours worked by an employee on each day of a week, design a flowchart and write a Python code to compute the average number of hours worked by the employee. Number of hours worked can be floating point values. For example, 7 hours 30 minutes is entered as 7.5 hours

**Input Format:**

Number of hours worked on first day

Number of hours worked on second day

Number of hours worked on third day

Number of hours worked on fourth day

Number of hours worked on fifth day

**Output Format:**

Average hours worked in a week