METHODS EXAMPLES

Q1) By using methods, develop calculator that will perform arithmetic operations such as addition, subtraction, multiplication, and division using methods. Two numbers are obtained from the user and the operation which the user needs to perform. Based on the option entered by the user, call the respective method to perform the arithmetic operation.

Q2) Implement Pythagoras theorem by using methods that will calculate hypotenuse, base or perpendicular by taking input from the user. Based on the option entered, ask the user to enter values of two other sides of a triangle.

$$(\text{Hypotenuse})^2 = (\text{Base})^2 + (\text{Perpendicular})^2$$

Q3) With the help of methods, write a program that will calculate acceleration, time, initial or final velocity by using following formula.

First equation of motion :

$$V = u + a*t$$

Q4 With the help of methods, write a program that will calculate speed, time, acceleration or initial velocity by using following formula.

Second equation of motion :

$$S = u*t + ½\ at\text{^}2$$

Q5) With the help of methods, write a program that will calculate acceleration, speed, initial or final velocity by reading values from user.

Third equation of motion :

$$V\text{^}2=u\text{^}2+2as$$

Q6) Write a program that will use methods and calculate the salary of an employee, by taking grade and basic salary as input from user while using conditional statement**.** on the bases of following table and formulae display the calculated salary along with his provided name.

Salary = B.S + H.R.A + M.A.+ V.M.A – P.F.

Grade	H.R.A.	M.A.	V.M.A.	P.F.
17	0.05(B.S.)	0.025 (B.S.)	0.01 (B.S.)	0.075 (B.S.)
18	0.055(B.S.)	0.03 (B.S.)	0.015 (B.S.)	0.075 (B.S.)
19	0.06(B.S.)	0.033 (B.S.)	0.015 (B.S.)	0.075 (B.S.)

Where:

B.S. => Basic Salary
H.R.A => House Rent Allowance
M.A. => Medical Allowance
V.M.A => Vehicle Maintenance Allowance
P.F. => Provident Fund