

# Print 5 lines about yourself using print function.

**Objective:** Printing 5 lines

**Task:** Write a python code to print 5 lines about myself using 'print' function

```
# Python program to print the given text in double quotes
```

```
text = """Hello, my name is Panja Bhoddham, and I am currently studying in 9th grade at  
T.I.School. I am passionate about science and enjoy learning about how things work in the world  
around us. In my free time, I like to read books, play sports, and spend time with my friends. My  
favorite subjects are Mathematics and Physics, and I hope to pursue a career in engineering in  
the future. I believe in hard work and always strive to improve myself both academically and  
personally."""
```

```
# Print the text  
print(text)
```

# Calculate energy using this formula: $\text{energy} = mgh$

**Objective:** Use of arithmetic operators

**Task:** Write a python code to calculate energy using this formula:  $\text{energy} = mgh$

```
# Program to calculate energy using the formula: energy = mgh
```

```
# Given constant for acceleration due to gravity (in m/s^2)  
g = 9.8 # Acceleration due to gravity in meters per second squared
```

```
# Input values from the user  
mass = float(input("Enter the mass of the object in kilograms (kg): "))  
height = float(input("Enter the height in meters (m): "))
```

```
# Calculate energy using the formula: energy = m * g * h  
energy = mass * g * height
```

```
# Display the result  
print(f"The gravitational potential energy is: {energy} joules")
```

# Calculate distance using the formula (distance = $ut + \frac{1}{2}at^2$ )

- $u$  - is the initial velocity (in meters per second, m/s)
- $t$  - is the time (in seconds, s)
- $a$  - is the acceleration (in meters per second square, m/s square)
- $\frac{1}{2}at^2$  - is the term for the distance traveled due to acceleration

**Objective:** Use of arithmetic operators

**Task:** Write a program to calculate distance using this formula: distance= $ut + \frac{1}{2}at^2$

# Python program to calculate distance using the formula: distance =  $ut + \frac{1}{2}at^2$

# Input values from the user

$u = \text{float}(\text{input}(\text{"Enter the initial velocity (u) in meters per second (m/s): "}))$

$t = \text{float}(\text{input}(\text{"Enter the time (t) in seconds (s): "}))$

$a = \text{float}(\text{input}(\text{"Enter the acceleration (a) in meters per second squared (m/s}^2\text{): "}))$

# Calculate distance using the formula: distance =  $ut + \frac{1}{2}at^2$

distance =  $(u * t) + (0.5 * a * t^2)$

# Display the result

$\text{print}(\text{f"The distance traveled is: {distance} meters"})$

# Demonstrate the use of floor division (//) and modulo operator (%)

**Objective:** Use of arithmetic operators

**Task:** Write a program to demonstrate the use of floor division (//) and modulo operator (%) in python

# Python program to demonstrate floor division (//) and modulo operator (%)

# Input two numbers from the user

$\text{num1} = \text{int}(\text{input}(\text{"Enter the first number: "}))$

$\text{num2} = \text{int}(\text{input}(\text{"Enter the second number: "}))$

```
# Using floor division (//) to get the quotient
quotient = num1 // num2

# Using modulo operator (%) to get the remainder
remainder = num1 % num2

# Display the results
print(f"Floor Division of {num1} // {num2} = {quotient}")
print(f"Modulo of {num1} % {num2} = {remainder}")
```

## Lock or unlock phone using pin and generate appropriate message

**Objective:** Use of If-else

**Task:** Write a program to lock or unlock phone using pin and generate appropriate message

```
# Python program to lock and unlock a phone using PIN without functions
```

```
# Set the correct PIN for the phone
correct_pin = "1234"
```

```
# Lock the phone initially
print("Phone is now locked.")
```

```
# Ask the user to enter the PIN to unlock the phone
entered_pin = input("Enter your PIN to unlock the phone: ")
```

```
# Check if the entered PIN matches the correct PIN
if entered_pin == correct_pin:
    print("Phone unlocked successfully!")
else:
    print("Incorrect PIN! Phone remains locked.")
```