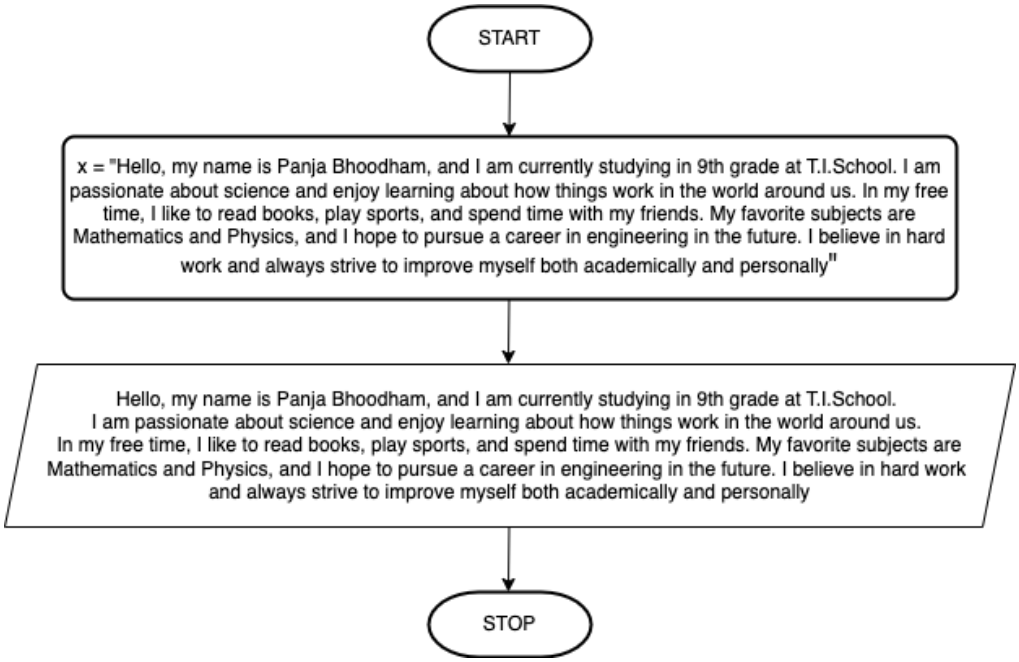
Print 5 lines about yourself using print function.

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



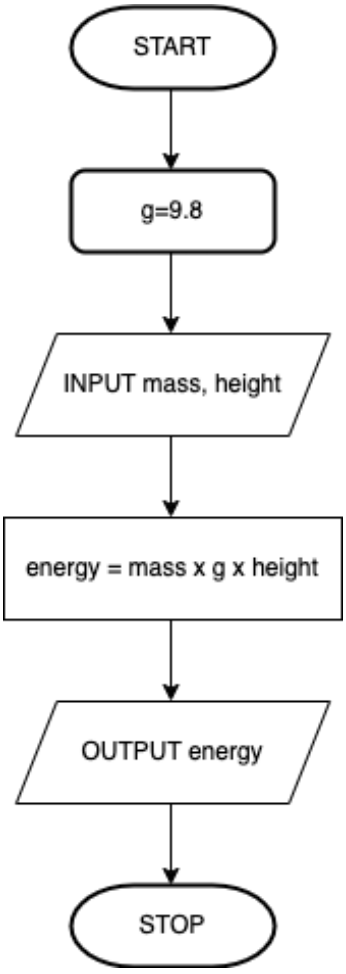
text = '''"Hello, my name is Panja Bhoodham, and I am currently studying in 9th grade at T.I.School. I am passionate about science and enjoy learning about how things work in the world around us. In my free time, I like to read books, play sports, and spend time with my friends. My favorite subjects 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: energy = mgh

Objective: Use of arithmetic operators
Task: Write a python code to calculate energy using this formula: *energy=mgh*

Program to calculate energy using the formula: energy = mgh



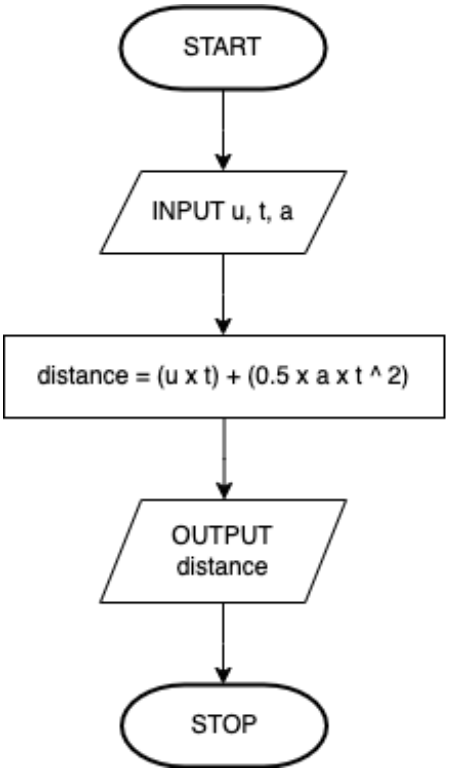

```
# Given constant for acceleration due to gravity (in m/s^2)
g = 9.8

# 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 + 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)
- 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+1/2 at 2



Identifiers:

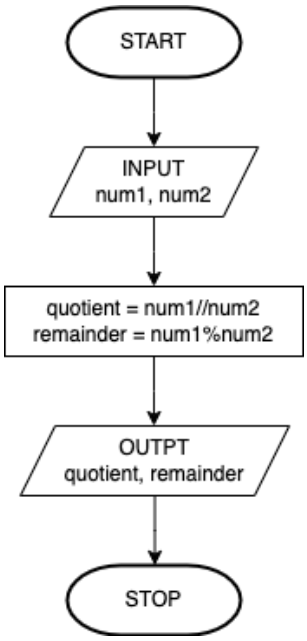
- Velocity (u)
- Time (t)
- Acceleration (a)

```
# Python program to calculate distance using the formula: distance = ut + 1/2 * a * t^2
```

```
# Input values from the user
u = float(input("Enter the initial velocity (u) in meters per second (m/s): "))
t = float(input("Enter the time (t) in seconds (s): "))
a = float(input("Enter the acceleration (a) in meters per second squared (m/s²): "))

# Calculate distance using the formula: distance = ut + (1/2) * a * t^2
distance = (u * t) + (0.5 * a * t**2)

# Display the result
print(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



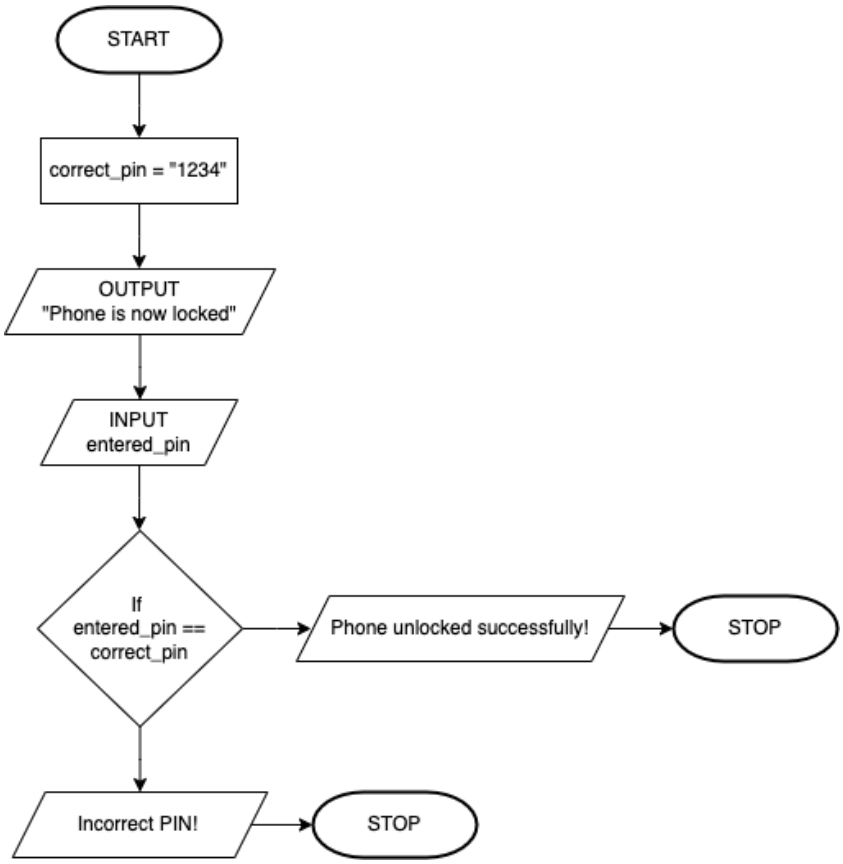

```
# Python program to demonstrate floor division (//) and modulo operator (%)

# Input two numbers from the user
num1 = int(input("Enter the first number: "))
num2 = int(input("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.")
```