

```
In [1]: print("hello world")
```

hello world

```
In [2]: name, age, height, is_student = "Alice", 25, 5.6, True
print("Name:", name, "| Age:", age, "| Height:", height, "| Is Student:",
is_student)
print("Greeting:", "Hello, " + name)
print("Next year age:", age + 1)
print("Half of height:", height / 2)
print("Is not a student?", is_student)
```

Name: Alice | Age: 25 | Height: 5.6 | Is Student: True  
Greeting: Hello, Alice  
Next year age: 26  
Half of height: 2.8  
Is not a student? True

```
In [24]: name = "usha"
age = 45
print("My name is " + name + " and I am " + str(age) + " years old.")
```

My name is usha and I am 45 years old.

```
In [4]: num1 = 10
num2 = 5
addition = num1 + num2
subtraction = num1 - num2
multiplication = num1 * num2
division = num1 / num2
print("Addition:", addition)
print("Subtraction:", subtraction)
print("Multiplication:", multiplication)
print("Division:", division)
```

Addition: 15  
Subtraction: 5  
Multiplication: 50  
Division: 2.0

```
In [7]: fruits = ["Apple", "Banana", "Cherry", "Mango", "Orange"]
for fruit in fruits:
    print(fruit)
```

Apple  
Banana  
Cherry  
Mango  
Orange

```
In [9]: for i in range(1, 5):
        print("*" * i)
```

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\*\*  
\*\*\*  
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```
In [23]: name, age, is_student = "sudha", 34, True
print("Original name:", name)
print("Original age:", age)
```

```
print("Original is_student:", is_student)
name = "Bob"
age += 1
is_student = not is_student
print("Modified name:", name)
print("Modified age:", age)
print("Modified is_student:", is_student)
```

Original name: sudha  
Original age: 34  
Original is\_student: True  
Modified name: Bob  
Modified age: 35  
Modified is\_student: False

```
In [11]: name = "gayathiri"
age = 21
dob = "04/06/2004"
height = 5.4
print("Name:", name)
print("Age:", age)
print("Date of Birth:", dob)
print("Height:", height, "ft")
```

Name: gayathiri  
Age: 21  
Date of Birth: 04/06/2004  
Height: 5.4 ft

```
In [12]: firstName = "Alice"
last_name = "Johnson"
print("First Name:", firstName)
print("Last Name:", last_name)
```

First Name: Alice  
Last Name: Johnson

```
In [13]: PI = 3.14159
radius = 5
circumference = 2 * PI * radius
print("Circumference:", circumference)
```

Circumference: 31.4159

```
In [14]: colors=["red","blue","green"]
print("First:",colors[0])
print("Last:",colors[-1])
colors[1]="yellow"
colors.append("purple")
print("Updated List:",colors)
```

First: red  
Last: green  
Updated List: ['red', 'yellow', 'green', 'purple']

```
In [ ]:
```

```
In [15]: base = 10
height = 5
area = (base * height) / 2
print("Area of triangle:", area)
```

Area of triangle: 25.0

```
In [16]: x = 10
x += 5
x -= 3
x *= 2
x /= 4
print("Final value:", x)
```

Final value: 6.0

```
In [17]: a, b = 10, 5
print(a > b, a < b, a == b, a != b, a >= b, a <= b)
```

True False False True True False

```
In [18]: a = float(input("enter the height1:"))
b = float(input("enter the height 2:"))
c = float(input("enter the height 3:"))
print("Average:", (a + b + c) / 3)
```

Average: 160.26666666666665

```
In [22]: print("_____Personal Details_____")
name = input("Enter the Name: ")
dob = input("Enter the DOB (dd/mm/yyyy): ")
age = input("Enter the age: ")
height = input("Enter the height: ")
weight = input("Enter the weight: ")
degree = input("Enter the degree: ")
gender = input("Enter the gender: ")

print("_____Entered Details_____")
print("Name: " + name)
print("DOB: " + dob)
print("Age: " + age)
print("Height: " + height + "ft")
print("Weight: " + weight + " kg")
print("Degree: " + degree)
print("Gender: " + gender)
```

```
_____Personal Details_____
_____Entered Details_____
Name: gayathri
DOB: 04/06/2004
Age: 21
Height: 160.0ft
Weight: 52 kg
Degree: B.tech
Gender: female
```

```
In [25]: num1 = int(input("Enter the first value: "))
num2 = int(input("Enter the second value: "))

arithmetic_operators = {
    "Addition": num1 + num2,
    "Subtraction": num1 - num2,
    "Multiplication": num1 * num2,
    "Division": (num1 / num2),
}
```

```
print(arithmetic_operators)
```

```
{' Addition': 1543700, 'Subtraction': 456300, 'Multiplication': 543700000000, 'Di  
vision': 1.8392495861688432}
```

```
In [26]: base = float(input("Enter the base of the triangle: "))
height = float(input("Enter the height of the triangle: "))
area = (base * height) / 2
print("\nThe area of the triangle","\n","base:", base, "\n","height:",
height,"\n" "total area of triangle is:", area)
```

```
The area of the triangle
base: 4.0
height: 9.0
total area of triangle is: 18.0
```

```
In [29]: Tamil = input("Enter grade for Tamil: ").upper()
English = input("Enter grade for English: ").upper()
Maths = input("Enter grade for Maths: ").upper()
Science = input("Enter grade for Science: ").upper()
Social = input("Enter grade for Social: ").upper()
grade_points = {
    "A": 5,
    "B": 4,
    "C": 3,
    "D": 2,
    "E": 1,
    "F": 0
}

tamil_grade = grade_points.get(Tamil, 0)
english_grade = grade_points.get(English, 0)
maths_grade = grade_points.get(Maths, 0)
science_grade = grade_points.get(Science, 0)
social_grade = grade_points.get(Social, 0)
total_grades = tamil_grade + english_grade + maths_grade + science_grade +social
average_grades = total_grades / 5
print("\n_____Result_____")
print("Total Grade Points:", total_grades)
print("Average Grade Point:", round(average_grades,3))
```

```
_____Result_____
Total Grade Points: 24
Average Grade Point: 4.8
```

```
In [ ]:
```