**Task**

**x = 12.2**

**y = 14**

**print(x)**

**print(x,y)**

**print('x:', x,'y:',y)**

**print ('x,: '+str(x)+'y:'+ str(y))**

**Python variable Name Rules:**

1. The first character is not a number.
2. There is no space in between a and b
3. No Special character except ‘\_’.
4. Reseverb word can not be the identifier.

**Reserved Word:**

False ,await, else,import, **lamda is mostly use**

House = 35.0

Rate = 12.50

* **Python has no constant**
* Perimeter = P(L+W)

**Task\_1**

**1. Area of a Circle: Define a constant PI = 3.14 and a variable radius. Calculate**

**the area of a circle using the formula area = PI \* radius^2.**

pi= 3.14

r = 3

area = pi\*r\*\*2

print(area)

28.26

**Task\_2**

**2. Swapping Variables: Define two variables a = 10 and b = 20. Swap their**

**values without using a third variable.**

a = 10

b = 20

swaper = a

a = b

b = swaper

print(a,b)

**Output:**

20 10

**2. Swapping Variables: Define two variables a = 10 and b = 20. Swap their**

**values without using a third variable.**

a = 10

b = 20

a= a+b

b = a-b

a = a-b

print(a,b)

**Output:**

**20 10**

**3. Simple Interest Calculation: Define variables P (Principal), R (Rate of**

**interest), and T (Time in years). Use the formula Simple Interest = (P \* R \* T) /**

**100 to calculate the interest.**

**P = 100**

**R = 5**

**T = 2**

**SI = (P\*R\*T)/100**

**print(SI)**

**Output:**

**10.0**

**4.4. Temperature Conversion: Write a Python program that defines a variable**

**celsius = 37. Convert this temperature to Fahrenheit using the formula**

**Fahrenheit = (Celsius \* 9/5) + 32.**

**celsius = 37**

**fahrenheit = (celsius \* 9/5) + 32**

**print(fahrenheit)**

**he park. It decided to dance quickly**

**in front of a group of penguins. Everyone was shocked, and one person even**

**screamed in surprise! What a strange day!**

**Procedure rules**

1. **( )**
2. **\*\***
3. **\*/% R-L**
4. **R-L**
5. **L-R**
6. **+,- L-R**
7. **= + == R-L**

**Order Of Evaluation:**

X = 1+2\*3 - 4 /5 \*\*6

= 1+ 6 - 4/15625

= 1+6 -0.000256

= 6.999744

**Example:**

**1.**

**hours = float(input("Enter Hours: "))**

**rate = float(input("Enter Rate: "))**

**pay = hours \* rate**

**# Print the result**

**print(f"Pay: {pay}")**

**2.**

**#print(n = 7)**

**print(7 + 5) # Output: 12**

**print(5.2, "this", 4 - 2, "that", 5 / 2.0)**

**Output:**

**12**

**5.2 this 2 that 2.5**

**3.**

**w1 = "All"**

**w2 = "work"**

**w3 = "and"**

**w4 = "no"**

**w5 = "play"**

**w6 = "makes"**

**w7 = "Jack"**

**w8 = "a"**

**w9 = "dull"**

**w10 = "boy."**

**# Print the sentence on one line**

**print(w1, w2, w3, w4, w5, w6, w7, w8, w9, w10)**

**OUTPUT:**

**All work and no play makes Jack a dull boy.**

**4.**

**6 \* 1 - 2 # Evaluates to 4**

**6 \* (1 - 2) # Evaluates to -6**

**5**

**# print("This line is commented out.")**

**print("This line will print.")**

**Output:**

**This line will print.**

**6.**

**bruce = 6**

**print(bruce + 4) # Output: 10**

**Output: 10**

**7.**

noun = input("Enter a noun: ")

verb = input("Enter a verb: ")

adjective = input("Enter an adjective: ")

adverb = input("Enter an adverb: ")

plural\_noun = input("Enter a plural noun: ")

past\_verb = input("Enter a past tense verb: ")

madlib = f"""

Today I saw a {adjective} {noun} at the park. It decided to {verb} {adverb}

in front of a group of {plural\_noun}. Everyone was shocked, and one person even

{past\_verb} in surprise! What a strange day!"""

print("\n--- Here is your Mad Lib! ---")

print(madlib)

**Output:**

**Enter a noun: cat**

**Enter a verb: dance**

**Enter an adjective: purple**

**Enter an adverb: quickly**

**Enter a plural noun: penguins**

**Enter a past tense verb: screamed**

**--- Here is your Mad Lib! ---**

**Today I saw a purple cat at t**