1. Create a Python string variable called greeting with the value "Hello World". Print the string and its length.
2. From the string greeting, print only "Hello".
3. Convert the string greeting into uppercase and lowercase.
4. Create two strings: first\_name = "John" and last\_name = "Doe". Concatenate them with a space in between.
5. Use f-string formatting to display:  
   "My name is John Doe and I am 25 years old."  
   (Use variables for name and age).
6. Print the sentence:  
   She said, "Python is fun!"  
   using escape characters correctly.
7. Take the string " Python Programming " and:
   * Remove extra spaces
   * Replace "Programming" with "Language"

8. Check if the word "Python" exists in the string "I am learning Python" using membership operator in.

9. Create two variables a = 10 and b = 3. Find:

* + Sum
  + Difference
  + Multiplication
  + Division
  + Modulus

10. Start with x = 5. Use shorthand assignment operators to:

* + Add 3 to x
  + Multiply x by 2

11. Check whether x is greater than, less than, or equal to 10.

12. Suppose age = 20 and has\_id = True. Write a condition to check if the person is eligible to vote (age >= 18 **and** has\_id).

13. Create two lists list1 = [1,2,3] and list2 = [1,2,3]. Compare them using == and is. Explain the difference.

14. Check if "Pro" exists in "Python Programming".

15. With p = 6 (binary 110) and q = 3 (binary 011), compute:

* + p & q
  + p | q
  + p ^ q
  + p << 1
  + p >> 1