python

# Question no.1

hours = int(input("Enter number of hours: "))

seconds = hours \* 3600

print(f"{hours} hours is equal to {seconds} seconds.")

1. Sum of two numbers:

python

# Question no.2

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

total = num1 + num2

print(f"The sum of {num1} and {num2} is {total}.")

1. Compare two numbers:

python

# Question no.3

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

if num1 > num2:

print(f"{num1} is bigger than {num2}.")

elif num1 < num2:

print(f"{num2} is bigger than {num1}.")

else:

print("Both numbers are equal.")

1. Replace 'a' with '0' in a string:

python

# Question no.4

text = input("Enter a text string: ")

new\_text = text.replace('a', '0')

print(f"Modified string: {new\_text}")

1. Length of a string:

python

# Question no.5

text = input("Enter a text string: ")

length = len(text)

print(f"The length of the string is {length}.")

1. For loop output (assuming you wanted to print numbers 1 to 5):

python

# Question no.6

for i in range(1, 6):

print(i)

1. While loop output (assuming you wanted to print numbers 1 to 5):

python

# Question no.7

i = 1

while i <= 5:

print(i)

i += 1

1. Average of two numbers:

python

# Question no.8

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

average = (num1 + num2) / 2

print(f"The average of {num1} and {num2} is {average}.")

For the rest of the questions, please specify the desired outputs, as some of them involve specific patterns or multiple outputs. I'll be happy to help you with them!

multiple outputs

Got it! Here are the remaining solutions with the desired outputs:

1. Specific output (please specify the pattern or numbers to print):

python

# Question no.9

# Assuming a pattern like:

# 1 2 3

# 4 5 6

# 7 8 9

for i in range(1, 10):

print(i, end=' ')

if i % 3 == 0:

print()

1. Output of the given Python code:

python

# Question no.10

var1 = 1

var2 = 2

var3 = "3"

print(var1 + var2 + var3)

**SOLUTION:** This will result in an error because you cannot concatenate an integer with a string.

1. Output of the given Python code:

python

# Question no.11

var1 = 1

var2 = 2

var3 = "3"

print(var1, var2, var3)

**SOLUTION:** The output will be 1 2 3

1. Output of the given Python code:

python

# Question no.12

a = 3 + 2 \* 4 + 4

print(a)

**SOLUTION:** The output will be 15 (2\*4 is done first, followed by addition).

1. Output of the given Python code:

python

# Question no.13

x = 8 + 8 \* 9

print(x)

**SOLUTION:** The output will be 80 (8\*9 is done first, followed by addition).

1. Output of the given Python code:

python

# Question no.14

i = 8 + 8 \* 9 + 9 \* (10-9)

print(i)

**SOLUTION:** The output will be 90 (multiplication and operations inside parentheses are performed first).

1. Output of the given Python code:

python

# Question no.15

p, q, r = 10, 20, 30

print(p, q, r)

**SOLUTION:** The output will be 10 20 30

1. Print letters separately using a For loop:

python

# Question no.16

text = input("Enter a text string: ")

for letter in text:

print(letter)

1. Specific pattern output with one print function (using \n):

python

# Question no.17

print(" \*\n \* \*\n \* \*\n \* \*\n\*\*\* \*\*\*\n \* \*\n \* \*\n \*\*\*\*\*")

1. Specific pattern output using 8 print functions:

python

# Question no.18

print(" \*")

print(" \* \*")

print(" \* \*")

print(" \* \*")

print("\*\*\* \*\*\*")

print(" \* \*")

print(" \* \*")

print(" \*\*\*\*\*")

1. Nested for loop for pattern:

python

# Question no.19

rows = 3

for i in range(1, rows + 1):

for j in range(i):

print("\*", end=' ')

print()

1. Nested for loop for pattern:

python

# Question no.20

rows = 5

for i in range(1, rows + 1):

for j in range(i):

print("\*", end=' ')

print()