Tuesday Sep 22, 2024

Name:

Discuss and complete the following questions with the person nearest you. You **may** be asked to share your thoughts with the class.

1. Evaluate the following expressions.

Expression	Value
`1 < 3`	
`3+2 >= 5`	
`4 == '4'`	
`4%2 != 0`	
`'cat' == 'cat'`	
`'cat' == 'cats'`	

Expression	Value
`1 < 3`	True
`3+2 >= 5`	True
`4 == '4'`	False
`4%2 != 0`	False
`'cat' == 'cat'`	True
`'cat' == 'cats'`	False

2. Write a program that prints every other character from a string using an `if` statement. For example for the string `"all-cats-are-good"` your program must print

```
a
l
c
t
-
r
-
o
d
```

```python
def evenChars(word: str) -> None:
    for i in range(0, len(word)):
        if i % 2 == 0:
            print(word[i])
evenChars('all-cats-are-good')
```

```
a
l
c
t
```

3. Write a function **factorial** that takes one argument: a positive integer. The function should print the factorial of the number. Recall, 5! = 5*4*3*2*1

```python
def factorial(N: int) -> None:
    total = 1
    for i in range(N, 0, -1):
        total *= i
    print(f"{N}! is {total}")

factorial(5)
```