CS 1358 Introduction to Programming in Python

Spring Semester 2024

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Self-Check 3

Answer the following questions to check your understanding of your material. Expect the same kind of questions to show up on your tests.

## 1. Definitions and Short Answers

1. When you call the function ord('A') it returns 65. What does it mean?
2. What is the value of chr(70)? (based on the knowledge of the previous question)
3. What is the difference between **ASCII** character set and **Unicode**? If a character is in ASCII, is it also in Unicode? Are there characters in Unicode that are not in ASCII?
4. How is **newline** (also known as a **line feed**) represented as a string literal? In other words, how do you print a newline?
5. What is a **carriage return**? What is its string literal, and what effect does it have when printed?
6. From the command line, what keys do you type to **kill** a running Python program?
7. Give an example of a **string literal** for McDonald's
8. Give an example of an **integer literal**
9. Give an example of a **floating point literal**
10. What is the difference between print(hello) and print("hello")?
11. What is a **numeral**? What is the difference between a numeral and a **number**?
12. What is the **value** of the integer literal 0b101? Express your answer in base-10 or in English.
13. What is the **octal literal** for the integer value 10?
14. What is the **value** of the integer literal 0x12? Express your answer in base-10 or in English.
15. What is the return **value** of
    * int('20')
    * int('0x20')
    * oct(16)
    * bin(16)
16. What is the value of
    * 0b0101 & 0b1100
    * 0b0101 | 0b1100
    * 0b0101 ^ 0b1100
    * ~0b0011
    * 0b1011 << 2
    * 0b1011 >> 2  
      write your answers as binary literals
17. What are two possible values of the bool class?
18. What is the value of
    * True and False
    * True or False
    * True and True
    * True or False
    * False and False
    * False or False
19. What is the value of
    * bool(20)
    * bool(0)
    * bool(None)
    * bool([ ])
    * bool([])
    * bool(0.0)
    * bool('0')
    * bool('hello')
    * bool('zero')
    * bool('')
    * bool(' ')
    * bool("")
    * bool('''''')
    * bool("""""")
    * bool('""')
    * bool("''")
20. What is the value of
    * 20 or False
    * 20 and False
    * False and 20
    * False or 20
    * [ ] or 20
    * [ ] and 20
    * 20 or [ ]
    * 20 and [ ]
    * 30 or 20
    * 20 or 30
21. Assume x = 3 and y = 2, what is the value of
    * x == 3 and y > 2
    * x <= 3 and y >= 2
    * x != 3 or y >= 2
    * x != 3 and y == 2
    * x >= 3 >= y > 2
    * x >= 3 > y >= 2
    * not (x != 3) and not (y < 2)
22. What is the value of
    * "hello" > "Hello"
    * 'hello' > 'world'
    * 'hello' == 'HELLO'
    * 'hello' == 'he11o'
    * '2000' == '2OOO'
    * 'Abacus' < 'abacus'
    * 'about' < 'abnormal'
    * 'I' == '|'
    * 'ZOO' != '200'
    * 'uber' == 'über'
    * 'naive' == 'naïve'
    * 'Dijkstra' == 'Dĳkstra'
23. What is the meaning of **lexicographical order**?
24. What is the **data type** of 2+3j? What is the meaning of 3j?