

# Homework 03

1. Which of the following statement is INVALID?

- (a) `x = y = z = 1`
- (b) `x = ( y = z + 1)`
- (c) `x, y = y, x`
- (d) `x += y`

2. Which of the following expression is INVALID?

- (a) `int32`
- (b) `40XL`
- (c) `self`
- (d) `__name__`

3. Which of the following sentences are INCORRECT?

- (a) Other than dictionary, all other data types can be “tested” as True or False.
- (b) Empty string will be evaluated to “False”
- (c) Empty List string will be evaluated to “False”
- (d) Any number (integer or float) that has 0 value will be evaluated to “False”

4. Which of the following data types are NOT Python data type?

- (a) `char`
- (b) `int`
- (c) `float`
- (d) `list`

5. Which of the following sentences are INCORRECT:

- (a) In a string, each character can be see as a string with the length euqal to 1

- (b) string terminates with `\0`
- (c) string is quoted either with single or double quote characters.
- (d) A pair of 3 consecutive double quote can contain a string with new line character or other special characters.

**6. Which of the following statement will NOT create a dictionary:**

- (a) `dic1 = {}`
- (b) `dict2 = {3 : 5}`
- (c) `dict3 = {[1, 2, 3]: "usetc"}`
- (d) `dict4 = {(1, 2, 3): "usetc"}`

**7. Which of the following statement is CORRECT?**

- (a) `min = x if x < y else y`
- (b) `max = x > y ? x : y`
- (c) `if ( x > y ) print x`
- (d) `while True: pass`

**8. Which of the following string is a CORRECT (select all that apply)?**

- (a) `'abc" ab"`
- (b) `'abc" ab'`
- (c) `"abc"ab"`
- (d) `"abc\"ab"`

**9. The correct result of `"ab" + "c" * 2` is?**

- (a) `abc2`
- (b) `abccabc`
- (c) `abcc`
- (d) `ababcc`

**10. Which of the following statement is invalid?**

- (a) `"New York".encode()`
- (b) `"New York".decode()`
- (c) `"New York".encode().decode()`
- (d) `None of above`

**11. What is the output of the following piece of code?**

```
Str1 = "examination is a word, and example is also a word!!!"  
str2 = "exam";  
print(str1.find(str2, 5))
```

- (a) 0
- (b) 7
- (c) 27
- (d) -1

**12. For the following script:**

```
if k<=10 and k >0:  
    if k >5:  
        if k>8:  
            x=0  
        else:  
            x=1  
    else:  
        if k>2:  
            x=3  
        else:  
            x=4
```

If  $x = 3$ , which one of the following group numbers is the possible value for  $k$ ?

- (a) 3, 4, 5
- (b) 3, 4
- (c) 5, 6, 7
- (d) 4, 5

**13. Which one of the following is NOT Python key word?**

- (a) raise
- (b) with
- (c) import
- (d) final

**14. What is the result of calling the following function?**

```
def myfun():  
    pass
```

- (a) return: 0
- (b) return: error, exception
- (c) return: empty string
- (d) return: None

**15. For the following Python function:**

```
def showNnumber(numbers):  
    for n in numbers:  
        print(n)
```

**which one of the following call will create an error?**

- (a) ShowNnumber([2, 4, 5])
- (b) showNnumber('abcesf')
- (c) showNnumber(3.4)
- (d) showNnumber([12, 4, 5])

**16. For the following Python function:**

```
def chanageInt(number2):  
    number2 = number2+1  
    print("changeInt: number2= ",number2)
```

```
number1 = 2  
chanageInt(number1)  
print("number:",number1)
```

**which one of the following result is CORRECT?**

- (a) changeInt: number2= 3 number: 3
- (b) changeInt: number2= 3 number: 2
- (c) number: 2 changeInt: number2= 2
- (d) number: 2 changeInt: number2= 3

**17. The the following function definition:**

```
class Hello():  
    pass
```

**which one of the following statement is INCORRECT (select all that apply)?**

- (a) The instantiated object contains `__dir__()` method.
- (b) The instantiated object contains `__hash__()` method.
- (c) The instantiated object contains `__dir__()` method, but not `__hash__()`.
- (d) The instantiated object contains no its own methods since it did not define any.

**18. What is the output of the following piece of code?**

```
class hello():  
    def showInfo(sef):  
        print(self.x)
```

**which one of the following statement is CORRECT (select all that apply)?**

- (a) Class hello can not be instantiated
- (b) Class hello can be instantiated
- (c) Class hello can be instantiated, however the call to "showInfo" method will fail
- (d) Class hello can be instantiated and the "showInfo" method can be called without error

**19. For the follow Python class definition:**

```
class Hello():  
    def __init__(self, name)  
        self.name=name  
  
    def showInfo(self)  
        print(self.name)
```

**which one of the following code segments will execute without error?**

- (a) `h = Hello`  
      `h.showInfor()`
- (b) `h = Hello()`  
      `h.showInfor('John')`
- (c) `h = Hello('John')`  
      `h.showInfor()`
- (d) `h = Hello('admin')`  
      `1.showInfor`

**20. What is the output of the following piece of code if the user enters two lines containing 2 and 4 respectively?**

```
try:
    number = int(input("Please enter the number: "))
    print("Number:", number)
    print("====hello====")
except Exception as e:
    # report error
    print("Exception occurred: ", e)
else:
    print("All good!")
finally: #clean up everything
    print("finally")
print("end")
```

**If user entered “1a”, which one of the following result is correct?**

- (a) `Number: 1 invalid literal for int() with base 10:`  
      `finally`  
      `end`
- (b) `Exception occurred: invalid literal for int() with base 10:`  
      `finally`  
      `end`
- (c) `====hello====`  
      `Exception occurred: invalid literal for int() with base`  
      `10:`  
      `finally`  
      `End`
- (d) All above

**21. What is the correct output of the following snippet?**

```
print( 0.1 + 0.2 == 0.3)
```

- (a) False
- (b) -1
- (c) 0
- (d) while

**22. What is the correct output of the following snippet?**

```
ls = [3.5, "Python", [10, "LIST"], 3.6]  
ls[2][-1][1]
```

- (a) I
- (b) P
- (c) Y
- (d) 10

**23. For `str = "python"`, what is the correct statement to capitalize the `"str"`:**

- (a) `print(str[0].upper()+str[1:])`
- (b) `print(str[1].upper()+str[-1:1])`
- (c) `print(str[0].upper()+str[1:-1])`
- (d) `print(str[0].upper()+str[2:])`

**24. The follow Python dictionary of color coding, select the answer that will display "seashell" color code:**

```
DictColor = {"seashell": 123, "gold": 2342, "pink": 823, "brown":456,  
"purple":554,"tomato":735}
```

- (a) `print(DictColor.keys())`
- (b) `print(DictColor['123'])`
- (c) `print(DictColor.values())`
- (d) `print(DictColor['seashell'])`

**25. Select the correct result for the following Python code snippet:**

```
s = ["seashell", "gold", "pink", "brown", "purple", "tomato"]  
print(s[1:4:2])
```

- (a) ['gold', 'pink', 'brown']
- (b) ['gold', 'pink']
- (c) ['gold', 'pink', 'brown', 'purple', 'tomato']
- (d) ['gold', 'brown']

**26. Select the correct result for the following Python code snippet:**

```
ls = [[1,2,3],[[4,5],6],[7,8]]  
print(len(ls))
```

- (a) 3
- (b) 4
- (c) 8
- (d) 1

**27. What is the output of the following snippet?**

```
ls = ["2020", "20.20", "Python"]  
ls.append(2020)  
ls.append([2020, "2020"])  
print(ls)
```

- (a) ['2020', '20.20', 'Python', 2020]
- (b) ['2020', '20.20', 'Python', 2020, [2020, '2020']]
- (c) ['2020', '20.20', 'Python', 2020, ['2020']]
- (d) ['2020', '20.20', 'Python', 2020, 2020, '2020']

**28. What is the output of the following snippet?**

```
a = ["a", "b", "c"]  
b = a[::-1]
```



```
print(b)
```

- (a) ['a', 'b', 'c']
- (b) 'c', 'b', 'a'
- (c) 'a', 'b', 'c'
- (d) ['c', 'b', 'a']

**29. What is the output of the following snippet?**

```
dat=['1', '2', '3', '0', '0', '0']
for item in dat:
    if item == '0':
        dat.remove(item)
print(dat)
```

- (a) ['1', '2', '3']
- (b) ['1', '2', '3', '0', '0']
- (c) ['1', '2', '3', '0', '0', '0']
- (d) ['1', '2', '3', '0']

**30. What is the output of the following snippet?**

```
s = "the sky is blue"
print(s[-4:], s[:-4])
```

- (a) the sky is blue
- (b) blue is sky the
- (c) sky is blue the
- (d) blue the sky is