

1 point

1)

What will be the output type of the expression `5 + 2.0` ?

- int
 - float
 - str
 - bool
 - Invalid Expression (raises an error)
-

1 point

2)

What will be the output type of the expression `'5' * 2.0` ?

- int
 - float
 - str
 - bool
 - Invalid Expression (raises an error)
-

1 point

3)

What will be the output type of the expression `'5' + "2"` ?

- int
- float
- str

bool

Invalid Expression (raises an error)

4)

1 point

What will be the output type of the expression "5 + 2" ?

int

float

str

bool

Invalid Expression (raises an error)

5)

1 point

What will be the output type of the expression '5' > 2 ?

int

float

str

bool

Invalid Expression (raises an error)

6)

1 point

What will be the output type of the expression 5 == 5 or 2 ?

int

float

str

bool

Invalid Expression (raises an error)

7)

1 point

What will be the output type of the expression "555"[2] ?

int

float

str

bool

Invalid Expression (raises an error)

8)

1 point

What will be the output type of the expression "555":2] ?

int

float

str

bool

Invalid Expression (raises an error)

1 point

9)

What will be the output type of the expression "555"[-2] ?

- int
 - float
 - str
 - bool
 - Invalid Expression (raises an error)
-

1 point

10)

What will be the output type of the expression "555""['2']" ?

- int
 - float
 - str
 - bool
 - Invalid Expression (raises an error)
-

1 point

11)

What will be the output type of the expression "True" ?

- int
- float
- str

bool

NoneType

12)

1 point

What will be the output type of the expression `False` ?

int

float

str

bool

NoneType

13)

1 point

What will be the output type of the expression `5 + int("2")` ?

int

float

str

bool

Raises an error

14)

2 points

Select the expression(s) that are equivalent to the given expression.

1 $10 // 2 * 5 ** 2$

$((10 // 2) * 5) ** 2$

$(10 // 2) * (5 ** 2)$

$10 // ((2 * 5) ** 2)$

$(10 // (2 * 5)) ** 2$

15)

2 points

Select the expression(s) that are equivalent to the given expression.

1 $(10 + 2) * (5 - 3)$

$(10 + (2 * (5 - 3)))$

$((10 + 2) * (5 - 3))$

$(10 * 5) - (2 * 3)$

$10 + 2 * (5 - 3)$

16)

2 points

Select the expression(s) that are equivalent to the given expression.

1 $a == b > c == d$

$(a == b) > (c == d)$

$a == (b > (c == d))$

$(a == b) \text{ and } (b > c) \text{ and } (c == d)$

$(a == (b > c)) \text{ and } ((b > c) == d)$

17)

2 points

Select the expression(s) that are equivalent to the given expression.

1 not (a or b) and c

not a or b and c

not (a or (b and c))

(not a) or (b and c)

(not (a or b)) and c

18)

2 points

Select the expression(s) that are equivalent to the given expression.

1 a and not b or not c

(a and (not b)) or (not c)

(a and not b) or (not c)

a and (not (b or not c))

a and ((not b) or (not c))

19)

2 points

How does the Python interpreter parenthesize the following expression?

```
1 1 + 3 / 4 ** 2 * 0
```

- 1 + (((3 / 4) ** 2) * 0)
- 1 + ((3 / (4 ** 2)) * 0)
- (1 + 3 / 4) ** (2 * 0)
- All of the above

20)

2 points

Select the correct statement(s) about `print` in python.

- `print` is a built-in function.
- `print` prints space at the end of the line.
- In a python REPL/Notebook `print("hi")` will give same output as just "hi".
- `print` prints new line character at the end of the line.

21)

2 points

Select the correct statement(s) about `input` in python.

- `input` can be only used in python scripts and not in REPL/Notebook.
- `input` is a built-in function.
- `input` includes next line character each line.
- `input` accepts atmost one argument.

22)

Common data for the next 3 questions

This set of questions is intended for you to practice python tutor and get used to it. Watch [this](#) tutorial on how to use python tutor before attempting this questions.

Consider the code present in [this](#) python tutor link.

Answer the following questions by using the python tutor interface.

What is the value of `a` after executing line 3, using the input already given?

12

1 point

23)

What is the value of `a` after executing line 4, if input given changed to 14?

43

1 point

24)

What is the value of `a` after executing line 5, if the input is changed to 23?

35

1 point

25)

Common data for the next 3 questions

This set of questions is intended for you to practice python tutor and get used to it. Watch [this](#) tutorial on how to use python tutor before attempting this questions.

Consider the code present in [this](#) python tutor link.

Answer the following questions by using the python tutor interface.

What is the value of `a` after executing line 3, using the input already given?

5

1 point

26)

What is the value of `a` after executing line 4, if input given changed to 13?

70

1 point

27)

What is the value of `a` after executing line 5, if the input is changed to 8?

22

1 point

28)

2 points

We need to write a program that accepts two names (strings) as input and prints `True` if the first name comes before the second in alphabetical order, and `False` otherwise.

Sample test cases:

Input	Output
sachin rohit	False
saina sindhu	True

For example, `sachin` comes after `rohit`, so the expected output is `False`. Select all correct implementations of this program.



```
1 name1 = input()  
2 name2 = input()  
3 print(name1 < name2)
```



```
1 name1 = input()  
2 name2 = input()  
3 print(name1 > name2)
```

```
1 print(input() < input())
```



```
1 print(input() > input())
```



```
1 name1 = input()
2 name2 = input()
3 result = name1 < name2
4 print(result)
```



```
1 name1 = input()
2 name2 = input()
3 result = name1 > name2
4 print(result)
```

29)

2 points

E is a boolean variable. Consider the following sequence of expressions:

```
1 not E
2 not not E
3 not not not E
4 not not not not E
5 .
6 .
7 .
```

This pattern keeps repeating for a thousand lines. If line number 500 evaluates to False , what is the value of E ?

Hint: Two negatives make a positive.

True

False

Cannot be determined

