

Midterm sample questions

1) What Python statement exits out of a function and gives the result to the caller?
→

2) What is wrong with the following code snippet?

```
mystery(10, 2)
def mystery(num1, num2) :
    result = num1 ** num2
    return result
```

→

3) Consider the following code segment: Find all the local variables?

```
sum = 0
interest = 0.25
def main() :
    avg = 0
    total = 0
    for i in range(6) :
        iSquared = i * i
        total = total + iSquared
        avg = total / i
    print(total)
```

→ print(avg)

→

4) Consider the following code segment – what is the output?

```
def f1():
    print("A", end="")

def f2():
    f1()
    print("B", end="")
```

→

5) Find the output of the following code:

```
def withdraw(amount, a_bal):
    if a_bal >= amount:
        balance = a_bal - amount
        return balance
```

```
balance = 1000
bal = withdraw(500, balance)
print(balance)
print(bal)
```

→

- 6) What is the output of the following code?

```
def f1():  
    print('a', end="")  
    return 'b'
```

```
def f2():  
    print('c', end="")  
    f3()  
    print('e', end="")
```

```
def f3():  
    print('f', end="")  
    f1()  
    print('g', end="")
```

```
f2()
```

→

- 7) What is the output of the following code?

```
def square(x):  
    y = x * x  
    return y
```

```
def sumOfSquares(x, y, z):  
    a = square(x)  
    b = square(y)  
    c = square(z)  
    return a + b + c
```

```
def main():  
    a = -5  
    b = 2  
    c = 10  
    result = sumOfSquares(a, b, c)  
    print(result)
```

```
main()
```

→

- 8) What is the output of x?

```
x = "university"  
print (x[:4])      →  
print(x[5:0:-2])   →
```

- 9) Assuming that the user inputs 30 as the age, what is the output?

```
age = int(input("Enter your age: "))  
if age < 10:
```

```

    print("Child", end=',')
if age < 30:
    print("Adult", end=',')
if age < 70:
    print("Old", end=',')
if age < 100:
    print("Impressively Old", end=',')

```

→

10) What is the output of the following code below?

```

x="Hi there, how are you?"
if 'you' in x:
    print('yes')
else:
    print('no')

```

→

11) What is the output of the following code below?

```

my_string="hello"
if 10 % 5:
    print('true')
elif "le" not in my_string :
    print('false')
else:
    print('none')

```

→

12) What is the output of the following code below?

```

my_str = "university"
count = 0
for char in my_str:
    if char == "i":
        continue
    else:
        count = count + 3
print(count)

```

→

13) x = 'e'

```

y = 3
if x in "computer science":
    y = y + 5
else:
    y = y + 10
if "x" in "computer science":
    y = y + 20
else:
    y = y + 40
print (y)

```

→

14) What is the output of the following code below?

```
m = 0
my_str= "mississippi"
for char in my_str:
    if char == "s":
        continue
    if char == "p":
        break
    m = m + 2
print(m)
```

→

15) What is the output of the following code below?

```
m = 1
for x in [1,2,3]:
    for y in [3,1,4]:
        if x == y:
            m = m * x
print (m)
```

→