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\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* BSc CS (Hons) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* SEC - Programming in Python \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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'''

'''1. What will be the output of the following code?'''

'''

a)

1

2'''

print("\n\na)")

i = 1

while True:

    if i%3==0:

        break

    print(i)

    i+=1

'''b)

A

B

C

D'''

print("\n\nb)")

x = 'abcd'

for i in x:

    print(i.upper())

'''

c)

0

0

1

0

2'''

print("\n\nc)")

i = 0

while i<5:

    print(i)

    i +=1

    if i==3:

        break

    else:

        print(0)

'''

d)

0

1

2

3'''

print("\n\nd)")

x = 'abcd'

for i in range(len(x)):

    print(i)

"""e) 35"""

print("\n\ne)")

x,n = 0,5

for i in range(1, n+1):

    for j in range(1, i+1):

        for j in range(1, j+1):

            x+=1

print(x)

'''2. What will bw thw output of the following code snippet [x<<2] if x = 1?'''

'''Output: 4'''

'''3. Write python's smallest code to swap to integer variables.'''

a,b = 2,3

a,b = b,a

'''4. What will be the output on executing each of the statements, following the assignment statement:'''

address = 'A-35, Lake view road, Agra'

'''a) 26'''

print(len(address))

'''b) oad, Agr'''

print(address[17:-1])

'''c) A-35, Lake view road, Agra'''

print(address[-len(address):len(address)])

'''d) A-35, Lake view road, Agra'''

print(address[:-12]+address[-12:])

'''e) -1'''

print(address.find('delhi'))

'''f) a-35, lAKE VIEW ROAD, aGRA'''

print(address.swapcase())

'''g) ['A-35', ' Lake view road', ' Agra']'''

print(address.split(','))

'''h) False'''

print(address.isalpha())

'''# i) A-35, Lake view road, Delhi'''

print(address.replace('Agra', 'Delhi'))

'''j) 11'''

print(address.rfind('view'))

'''5. What output occurs for the following program for the following inputs?'''

the\_max = int(input("Enter the upper limit: "))

the\_sum = 0

extra = 0

for number in range(1, the\_max):

    if number%2 and not number%3:

        the\_sum += number

    else:

        extra += 1  # Line 1

print(the\_sum)      # Line 2

print(extra)        # Line 3

'''

a) if input = 10, output from line 2?

12

a) if input = 11, output from line 3?

8'''