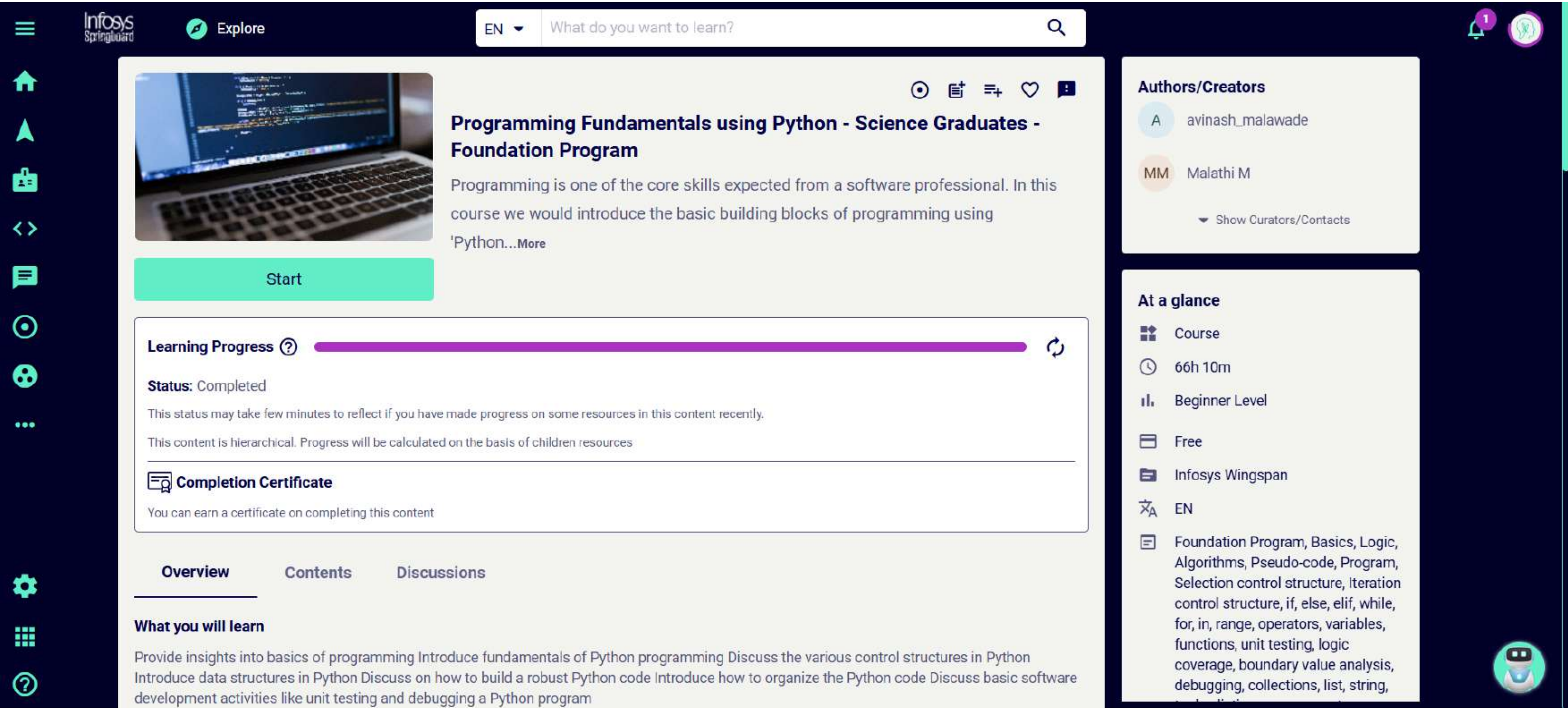

Programming Fundamentals using Python - Science Graduates - Foundation Program

Programming is one of the core skills expected from a software professional. In this course we would introduce the basic building blocks of programming using 'Python...More

Learning Progress

Status: Completed

This status may take few minutes to reflect if you have made progress on some resources in this content recently.

This content is hierarchical. Progress will be calculated on the basis of children resources

Completion Certificate

You can earn a certificate on completing this content

What you will learn

Provide insights into basics of programming Introduce fundamentals of Python programming Discuss the various control structures in Python Introduce data structures in Python Discuss on how to build a robust Python code Introduce how to organize the Python code Discuss basic software development activities like unit testing and debugging a Python program

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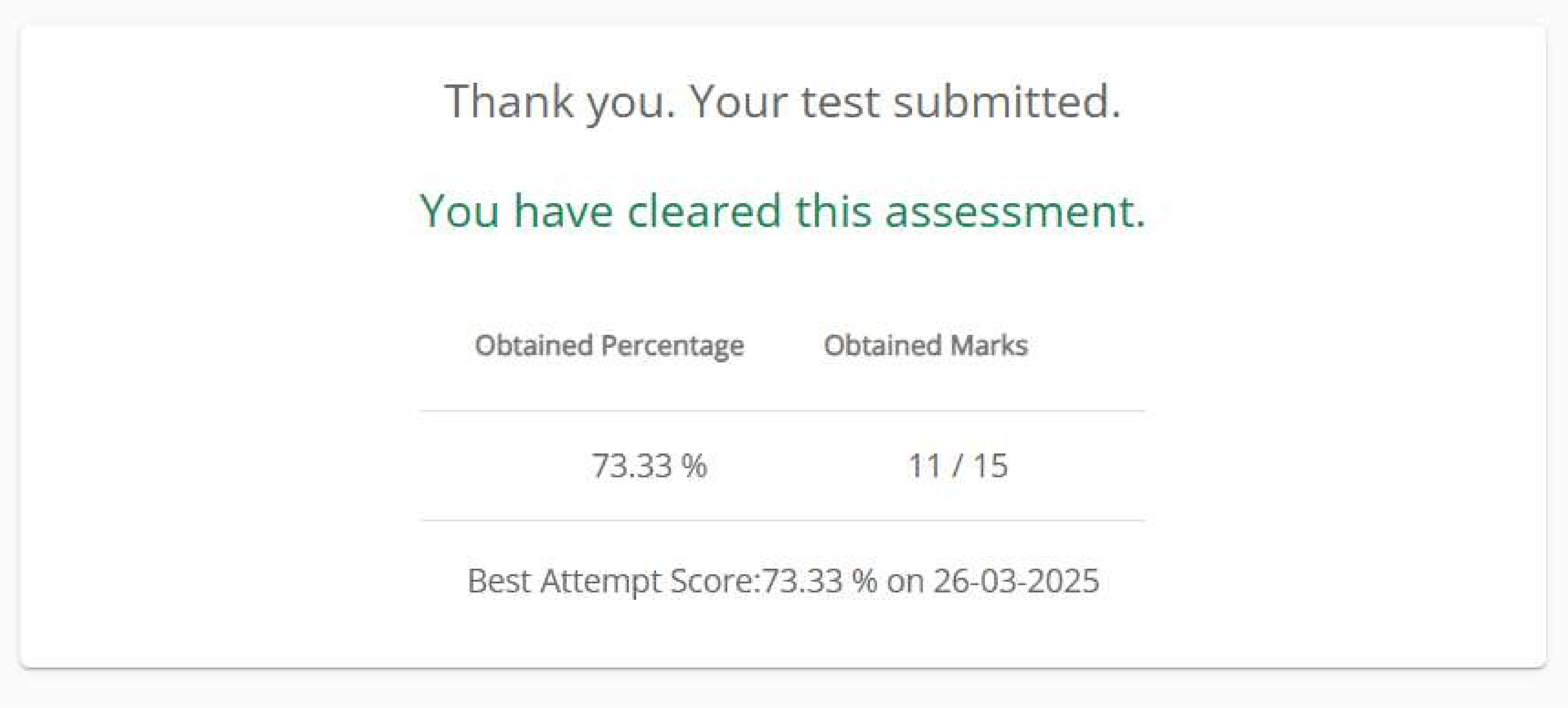
At a glance

- Course
- 66h 10m
- Beginner Level
- Free
- Infosys Wingspan
- EN
- Foundation Program, Basics, Logic, Algorithms, Pseudo-code, Program, Selection control structure, Iteration control structure, if, else, elif, while, for, in, range, operators, variables, functions, unit testing, logic coverage, boundary value analysis, debugging, collections, list, string,

For More Solutions: https://github.com/DevGoyalG/NIET-Infosys-Springboard

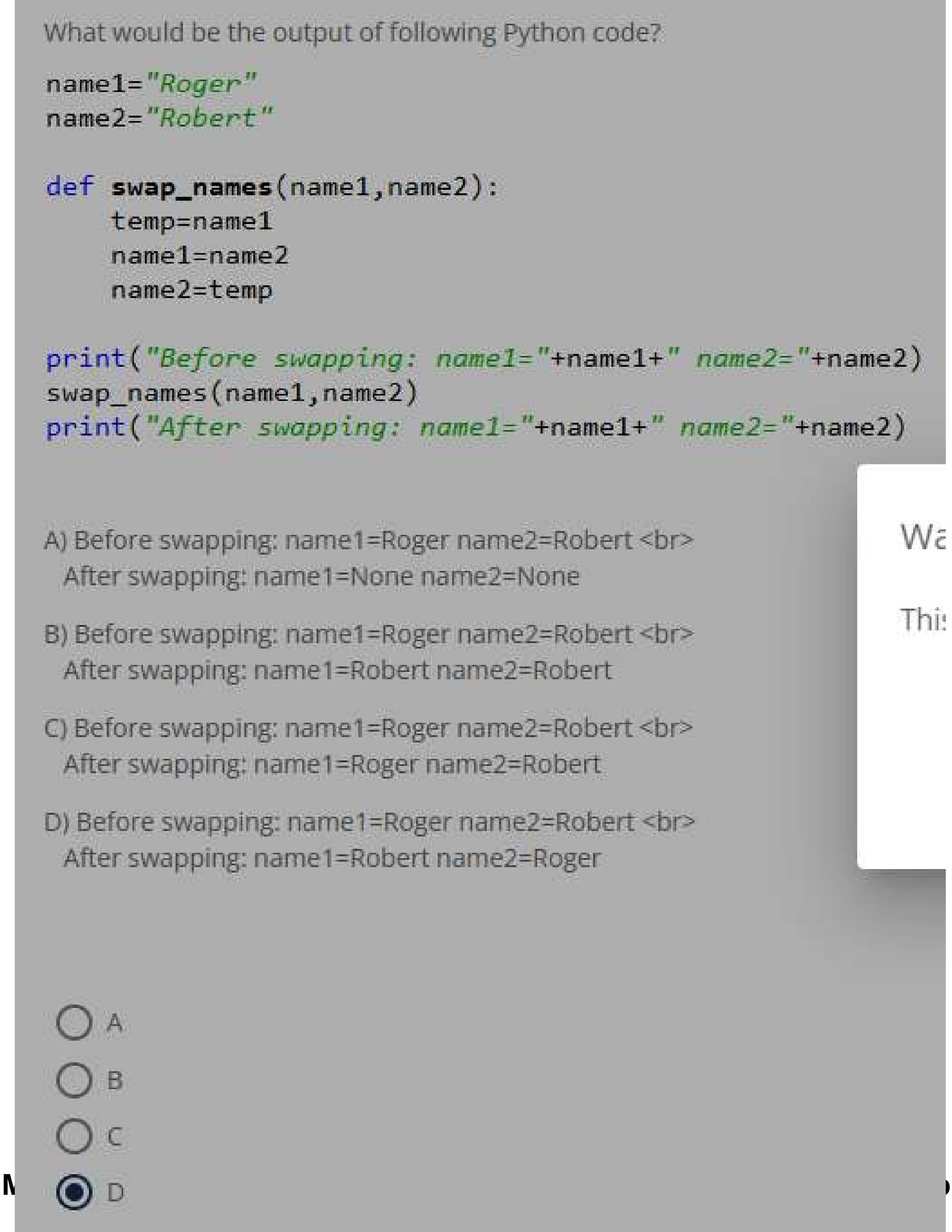


Thank you. Your test submitted.

You have cleared this assessment.

Obtained Percentage	Obtained Marks
73.33 %	11 / 15

Best Attempt Score:73.33 % on 26-03-2025



What would be the output of following Python code?

```
name1="Roger"
name2="Robert"

def swap_names(name1,name2):
    temp=name1
    name1=name2
    name2=temp

print("Before swapping: name1="+name1+" name2="+name2)
swap_names(name1,name2)
print("After swapping: name1="+name1+" name2="+name2)
```

A) Before swapping: name1=Roger name2=Robert
After swapping: name1=None name2=None

B) Before swapping: name1=Roger name2=Robert
After swapping: name1=Robert name2=Robert

C) Before swapping: name1=Roger name2=Robert
After swapping: name1=Roger name2=Robert

D) Before swapping: name1=Roger name2=Robert
After swapping: name1=Robert name2=Roger

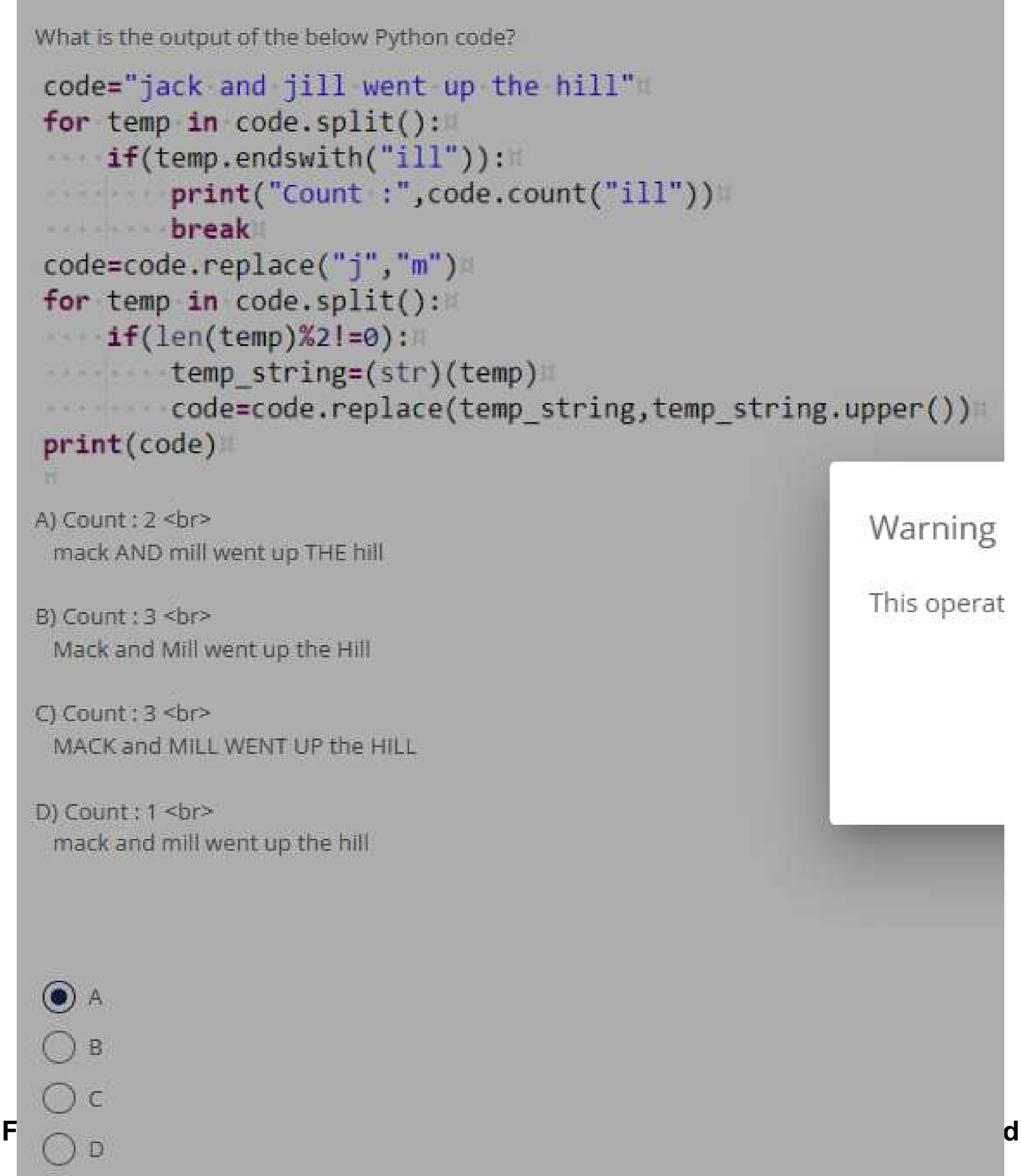
○ A

○ B

○ C

● D

For M oard



What is the output of the below Python code?

```
code="jack and jill went up the hill"
for temp in code.split():
    if(temp.endswith("ill")):
        print("Count :",code.count("ill"))
        break
code=code.replace("j","m")
for temp in code.split():
    if(len(temp)%2!=0):
        temp_string=(str)(temp)
        code=code.replace(temp_string,temp_string.upper())
print(code)
```

A) Count : 2
mack AND mill went up THE hill

B) Count : 3
Mack and Mill went up the Hill

C) Count : 3
MACK and MILL WENT UP the HILL

D) Count : 1
mack and mill went up the hill

Warning

This operat

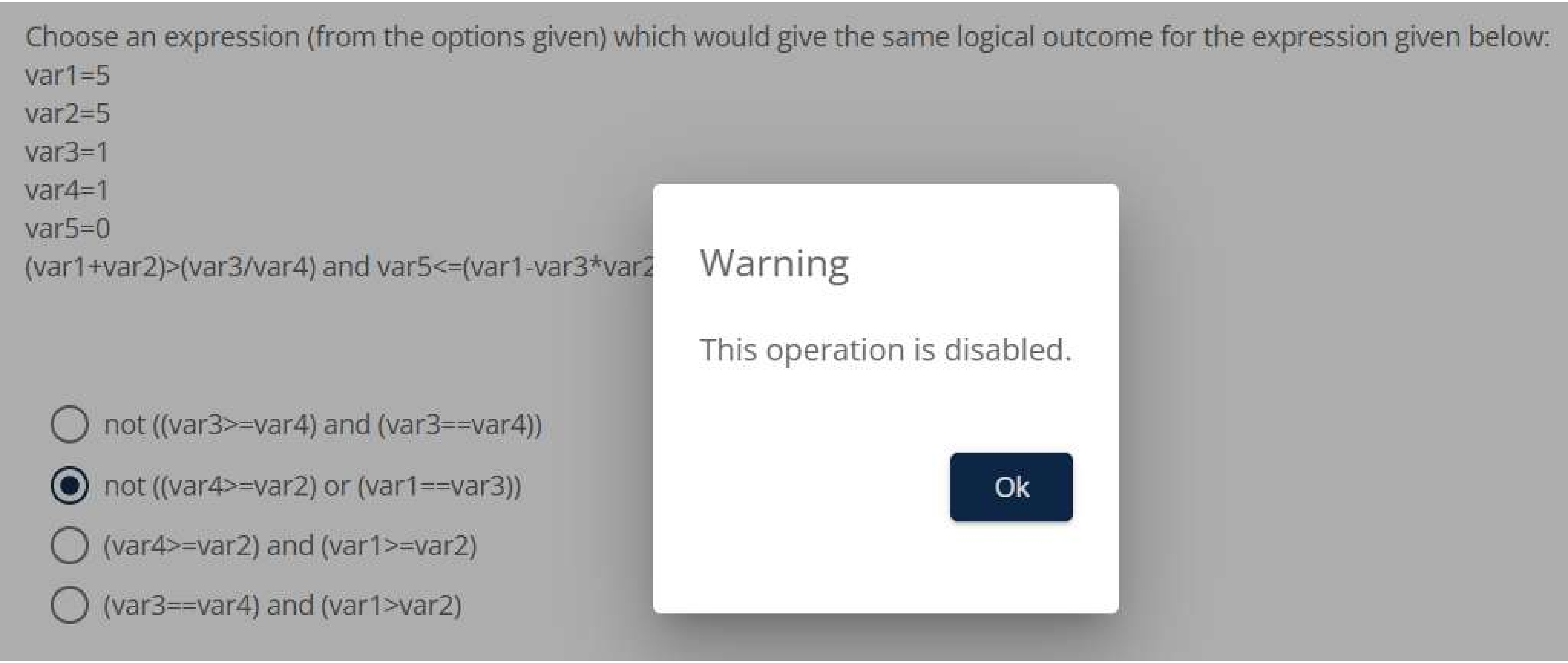
● A

○ B

○ C

○ D

F d



Choose an expression (from the options given) which would give the same logical outcome for the expression given below:

var1=5

var2=5

var3=1

var4=1

var5=0

(var1+var2)>(var3/var4) and var5<=(var1-var3*var2

Warning

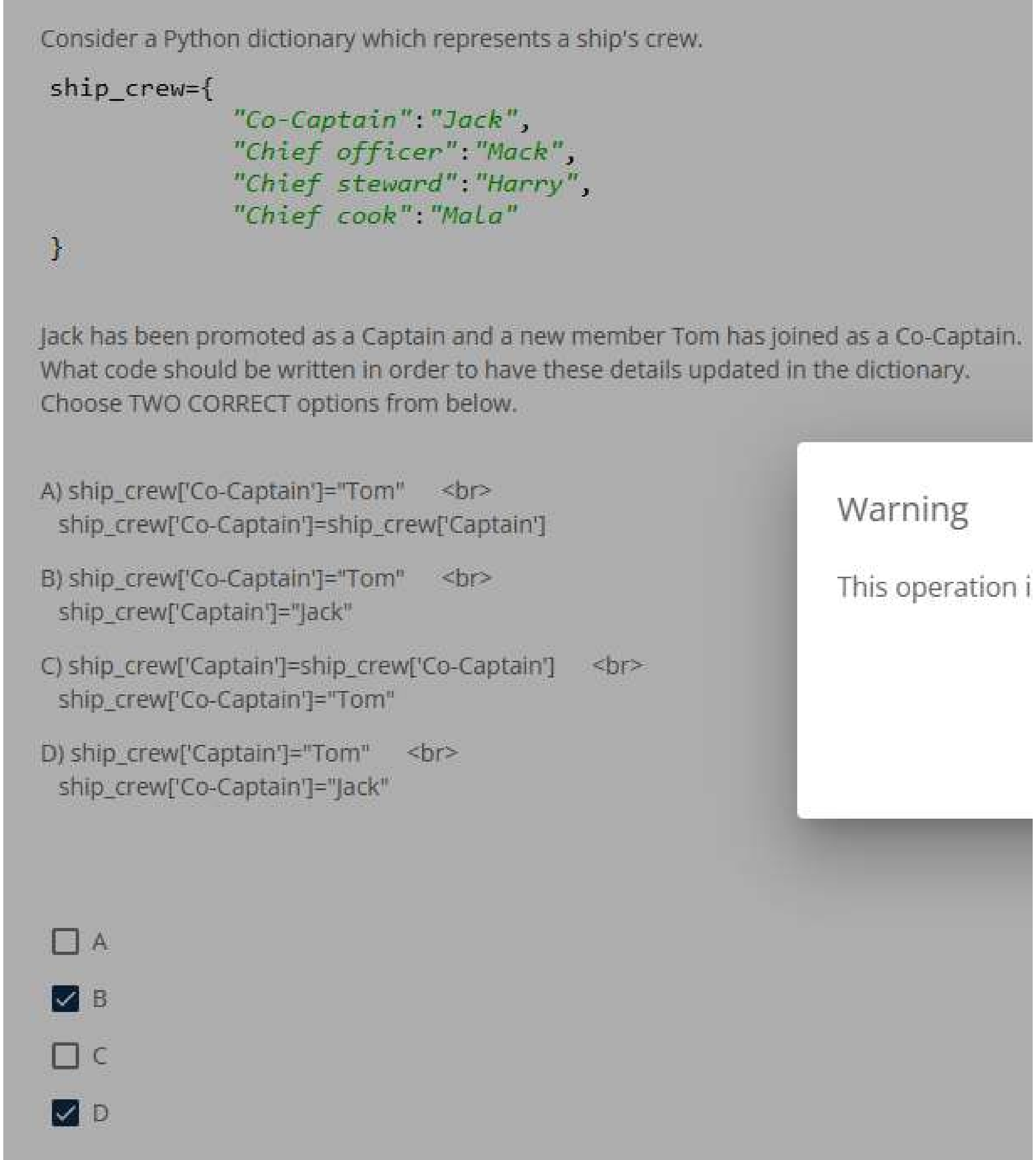
This operation is disabled.

○ not ((var3>=var4) and (var3==var4))

● not ((var4>=var2) or (var1==var3))

○ (var4>=var2) and (var1>=var2)

○ (var3==var4) and (var1>var2)



Consider a Python dictionary which represents a ship's crew.

```
ship_crew={
           "Co-Captain":"Jack",
           "Chief officer":"Mack",
           "Chief steward":"Harry",
           "Chief cook":"Mala"
}
```

Jack has been promoted as a Captain and a new member Tom has joined as a Co-Captain. What code should be written in order to have these details updated in the dictionary. Choose TWO CORRECT options from below.

A) ship_crew['Co-Captain']="Tom"
  ship_crew['Co-Captain']=ship_crew['Captain']

B) ship_crew['Co-Captain']="Tom"
  ship_crew['Captain']="Jack"

C) ship_crew['Captain']=ship_crew['Co-Captain']
  ship_crew['Co-Captain']="Tom"

D) ship_crew['Captain']="Tom"
  ship_crew['Co-Captain']="Jack"

Warning

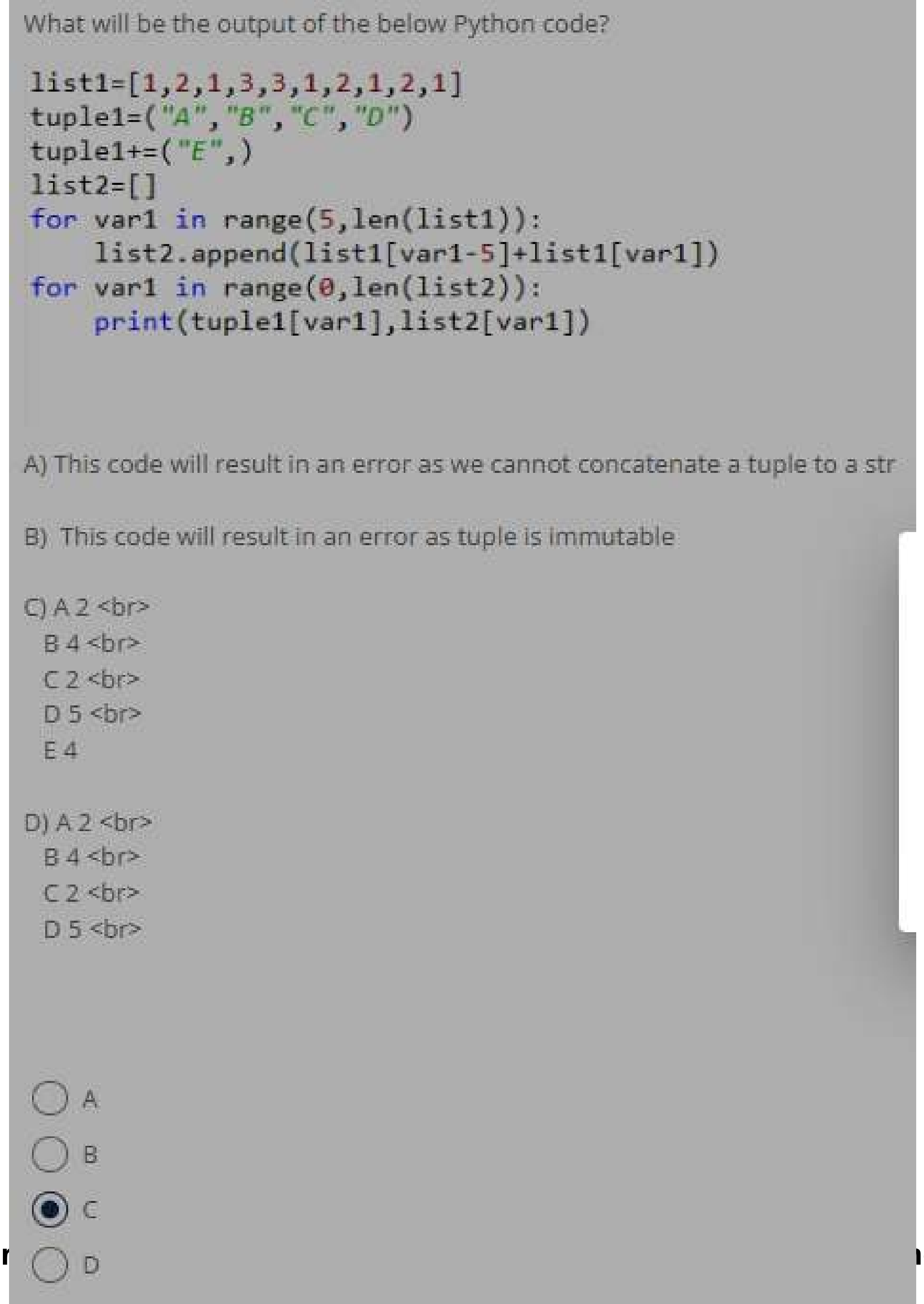
This operation i

□ A

☑ B

□ C

☑ D



What will be the output of the below Python code?

```
list1=[1,2,1,3,3,1,2,1,2,1]
tuple1=("A","B","C","D")
tuple1+=("E",)
list2=[]
for var1 in range(5,len(list1)):
    list2.append(list1[var1-5]+list1[var1])
for var1 in range(0,len(list2)):
    print(tuple1[var1],list2[var1])
```

A) This code will result in an error as we cannot concatenate a tuple to a str

B) This code will result in an error as tuple is immutable

C) A 2
B 4
C 2
D 5
E 4

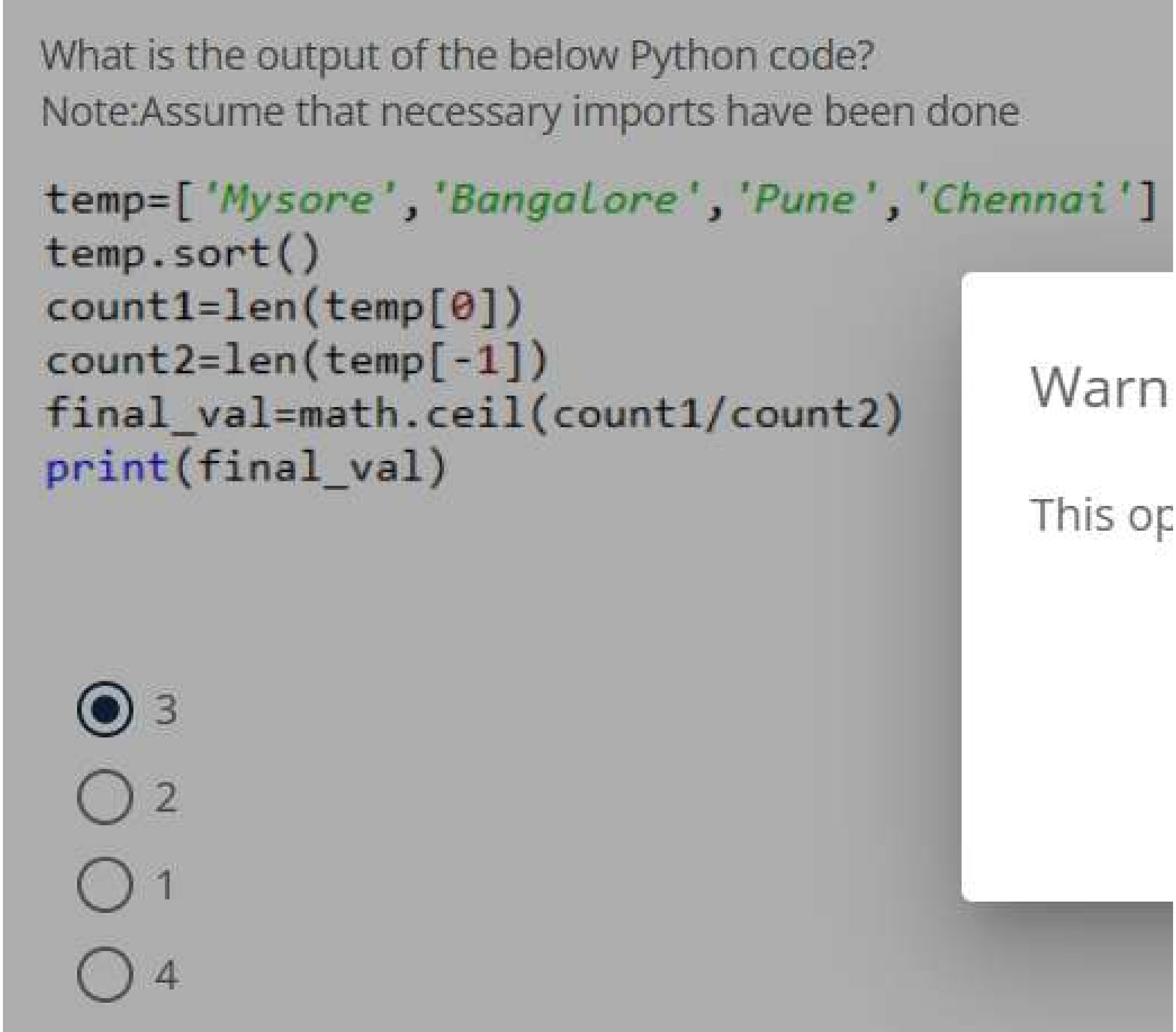
D) A 2
B 4
C 2
D 5

○ A

○ B

● C

○ D



What is the output of the below Python code?

Note:Assume that necessary imports have been done

```
temp=['Mysore','Bangalore','Pune','Chennai']
temp.sort()
count1=len(temp[0])
count2=len(temp[-1])
final_val=math.ceil(count1/count2)
print(final_val)
```

● 3

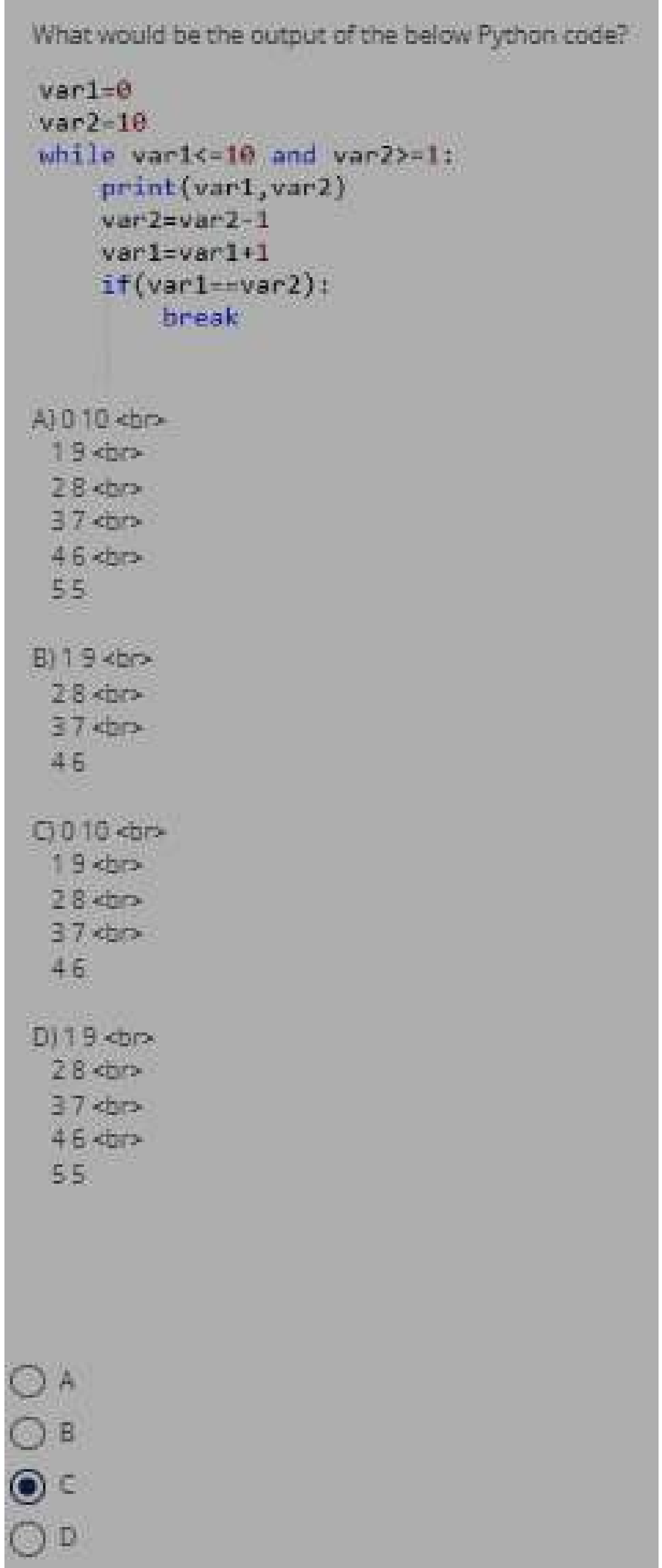
○ 2

○ 1

○ 4

Warn

This op



What would be the output of the below Python code?

```
var1=0
var2=10
while var1<=10 and var2>=1:
    print(var1,var2)
    var2=var2-1
    var1=var1+1
    if(var1==var2):
        break
```

A) 0 10
1 9
2 8
3 7
4 6
5 5

B) 1 9
2 8
3 7
4 6

C) 0 10
1 9
2 8
3 7
4 6

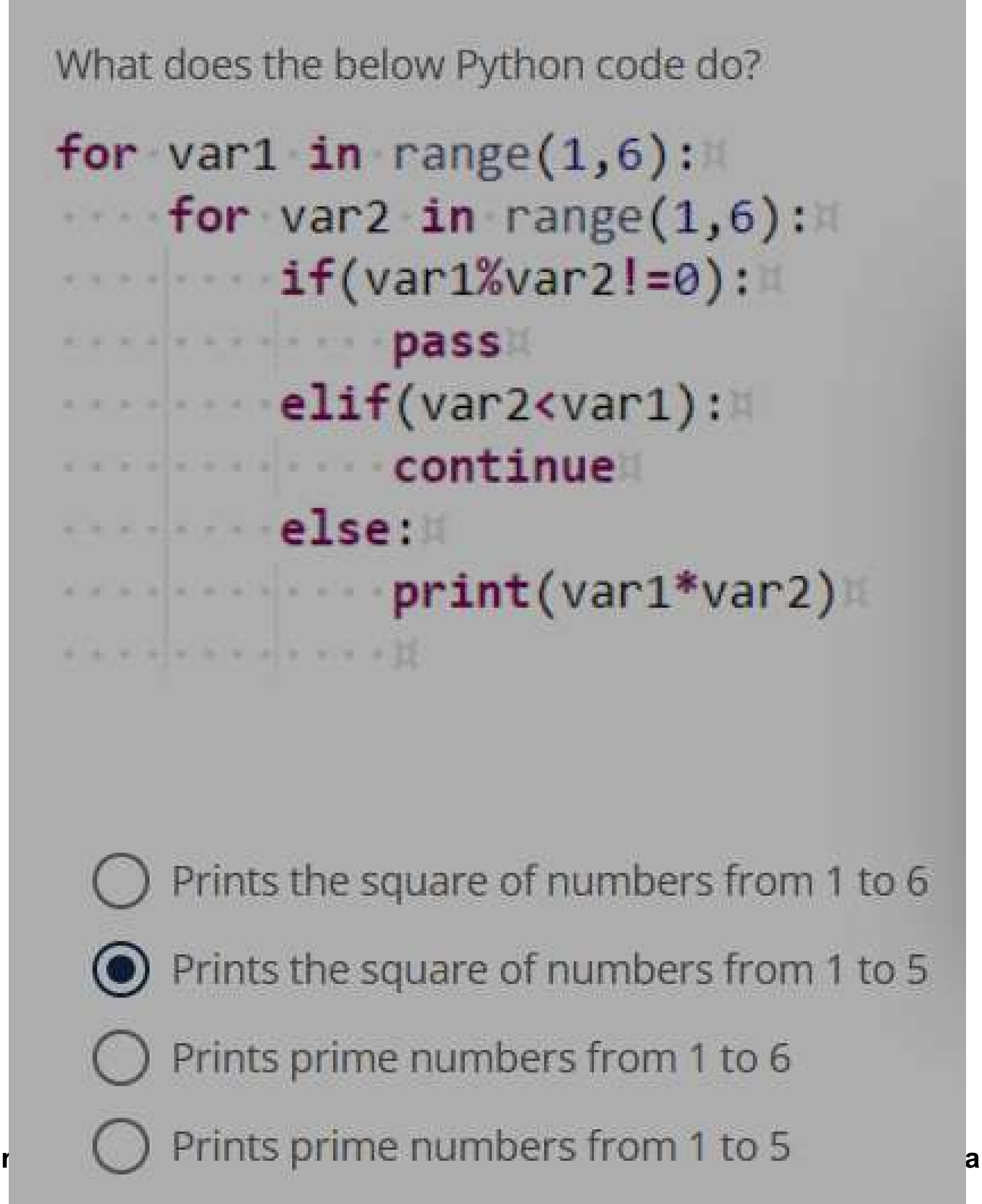
D) 1 9
2 8
3 7
4 6
5 5

○ A

○ B

● C

○ D



What does the below Python code do?

```
for var1 in range(1,6):
    for var2 in range(1,6):
        if(var1%var2!=0):
            pass
        elif(var2<var1):
            continue
        else:
            print(var1*var2)
```

○ Prints the square of numbers from 1 to 6

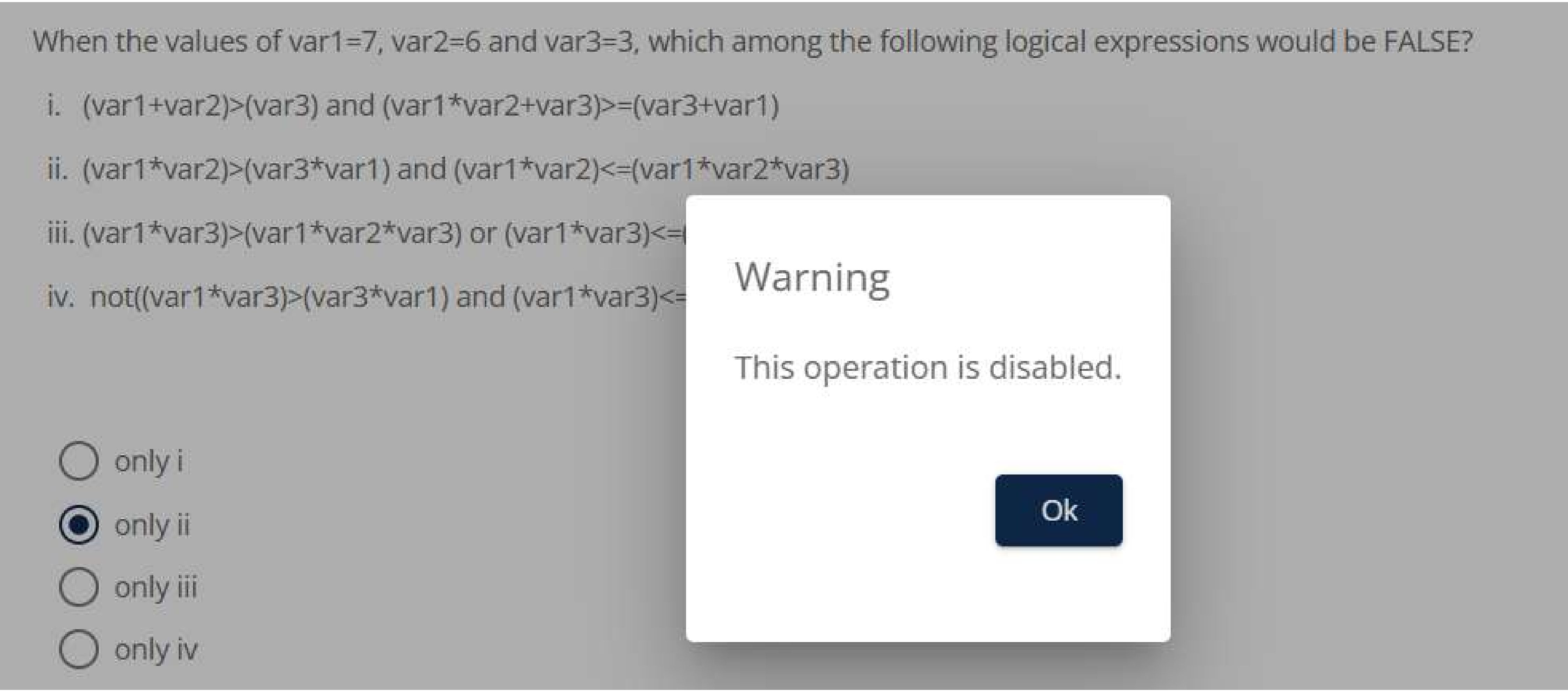
● Prints the square of numbers from 1 to 5

○ Prints prime numbers from 1 to 6

○ Prints prime numbers from 1 to 5

For

ard



When the values of var1=7, var2=6 and var3=3, which among the following logical expressions would be FALSE?

i. (var1+var2)>(var3) and (var1*var2+var3)>=(var3+var1)

ii. (var1*var2)>(var3*var1) and (var1*var2)<=(var1*var2*var3)

iii. (var1*var3)>(var1*var2*var3) or (var1*var3)<=

iv. not((var1*var3)>(var3*var1) and (var1*var3)<=

○ only i

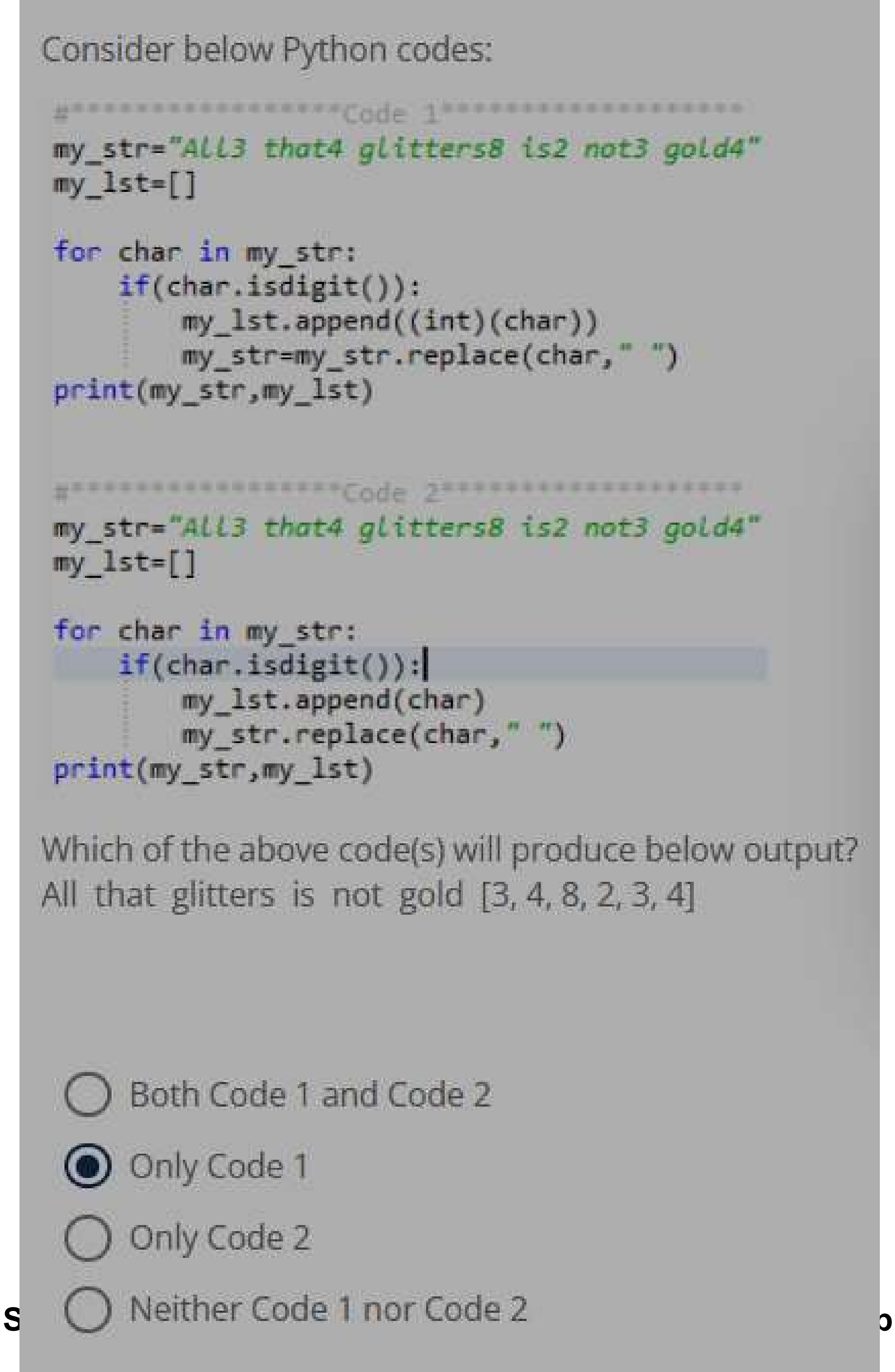
● only ii

○ only iii

○ only iv

Warning

This operation is disabled.



Consider below Python codes:

```
#*****************Code 1*******************
my_str="All3 that4 glitters8 is2 not3 gold4"
my_lst=[]

for char in my_str:
    if(char.isdigit()):
        my_lst.append((int)(char))
        my_str=my_str.replace(char," ")
print(my_str,my_lst)


#*****************Code 2*******************
my_str="All3 that4 glitters8 is2 not3 gold4"
my_lst=[]

for char in my_str:
    if(char.isdigit()):
        my_lst.append(char)
        my_str.replace(char," ")
print(my_str,my_lst)
```

Which of the above code(s) will produce below output?

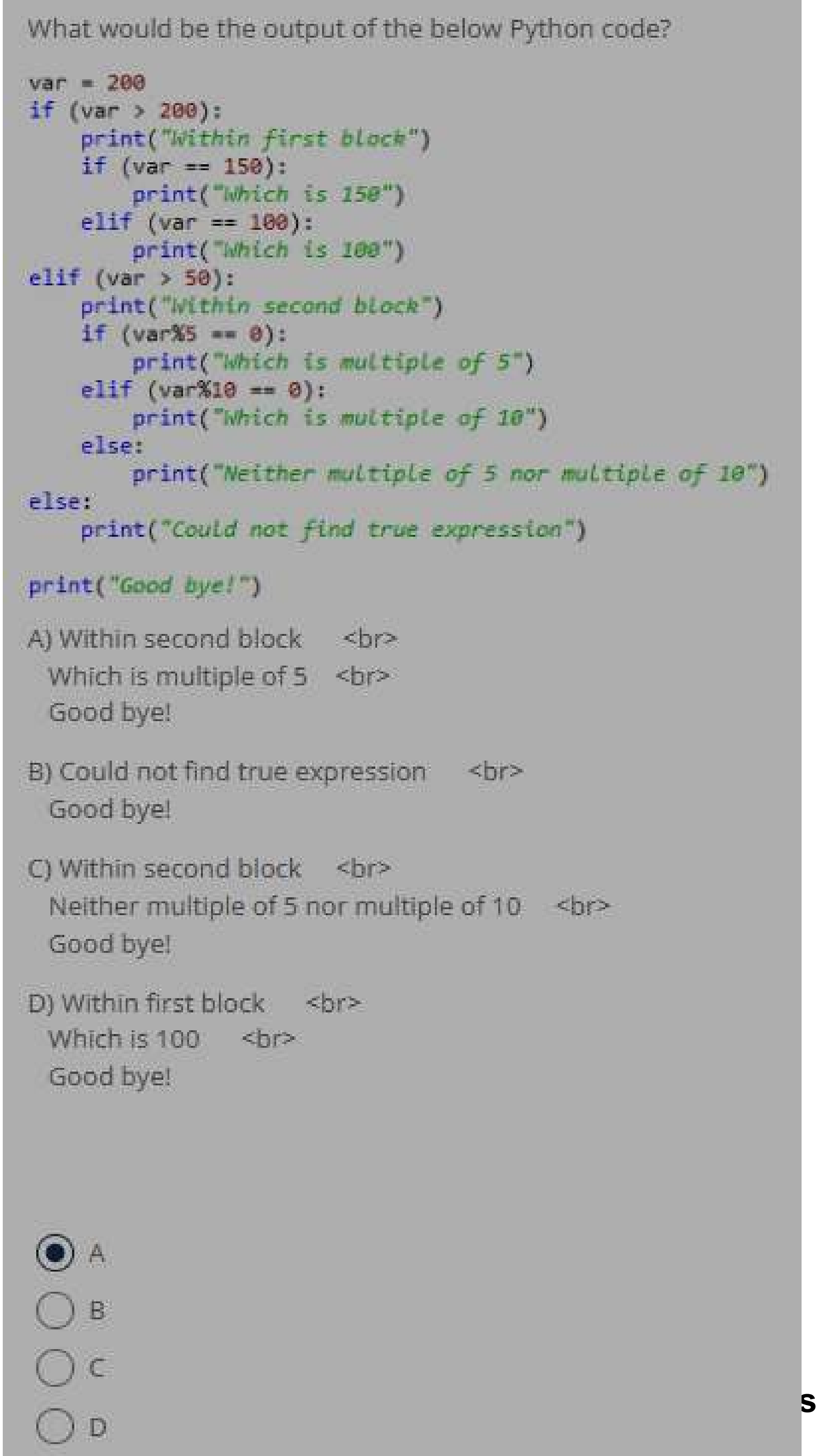
All that glitters is not gold [3, 4, 8, 2, 3, 4]

○ Both Code 1 and Code 2

● Only Code 1

○ Only Code 2

○ Neither Code 1 nor Code 2



What would be the output of the below Python code?

```
var = 200
if (var > 200):
    print("Within first block")
    if (var == 150):
        print("Which is 150")
    elif (var == 100):
        print("Which is 100")
elif (var > 50):
    print("Within second block")
    if (var%5 == 0):
        print("Which is multiple of 5")
    elif (var%10 == 0):
        print("Which is multiple of 10")
    else:
        print("Neither multiple of 5 nor multiple of 10")
else:
    print("Could not find true expression")

print("Good bye!")
```

A) Within second block
Which is multiple of 5
Good bye!

B) Could not find true expression
Good bye!

C) Within second block
Neither multiple of 5 nor multiple of 10
Good bye!

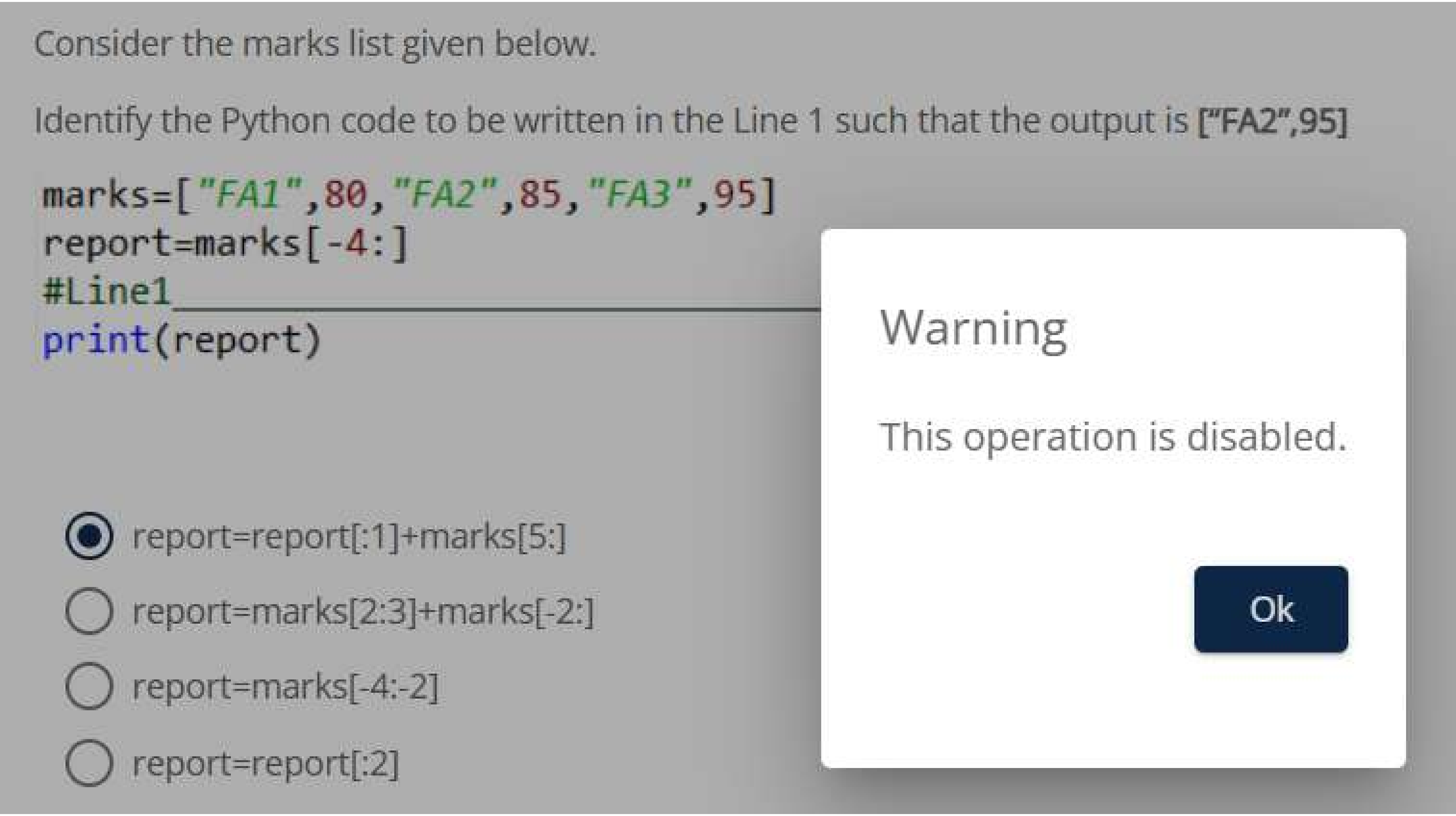
D) Within first block
Which is 100
Good bye!

● A

○ B

○ C

○ D



Consider the marks list given below.

Identify the Python code to be written in the Line 1 such that the output is **["FA2",95]**

```
marks=["FA1",80,"FA2",85,"FA3",95]
report=marks[-4:]
#Line1
print(report)
```

● report=report[:1]+marks[5:]

○ report=marks[2:3]+marks[-2:]

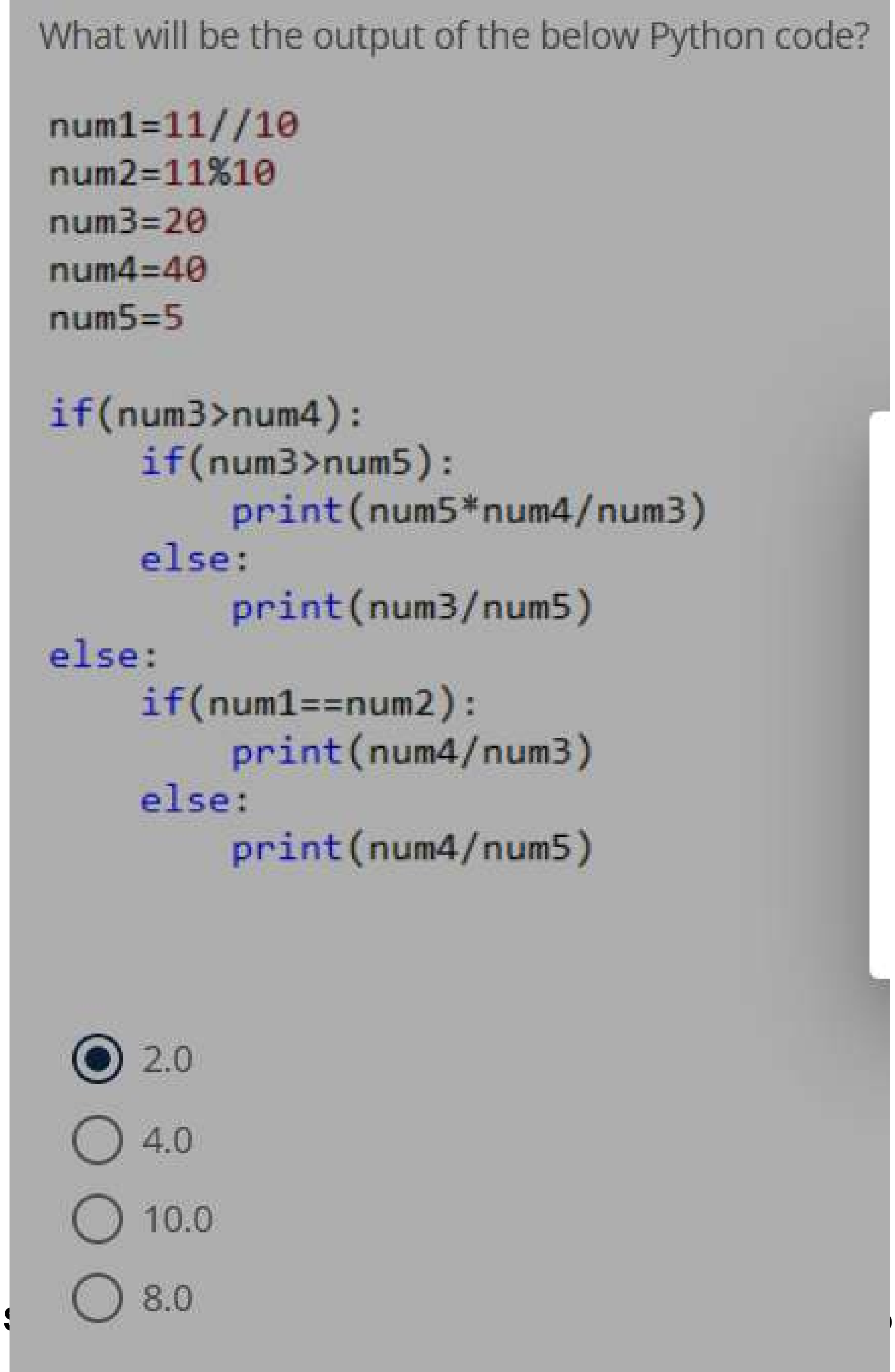
○ report=marks[-4:-2]

○ report=report[:2]

Warning

This operation is disabled.

For More Solutions: https://github.com/DevGoyalG/NIET-Infosys-Springboard



What will be the output of the below Python code?

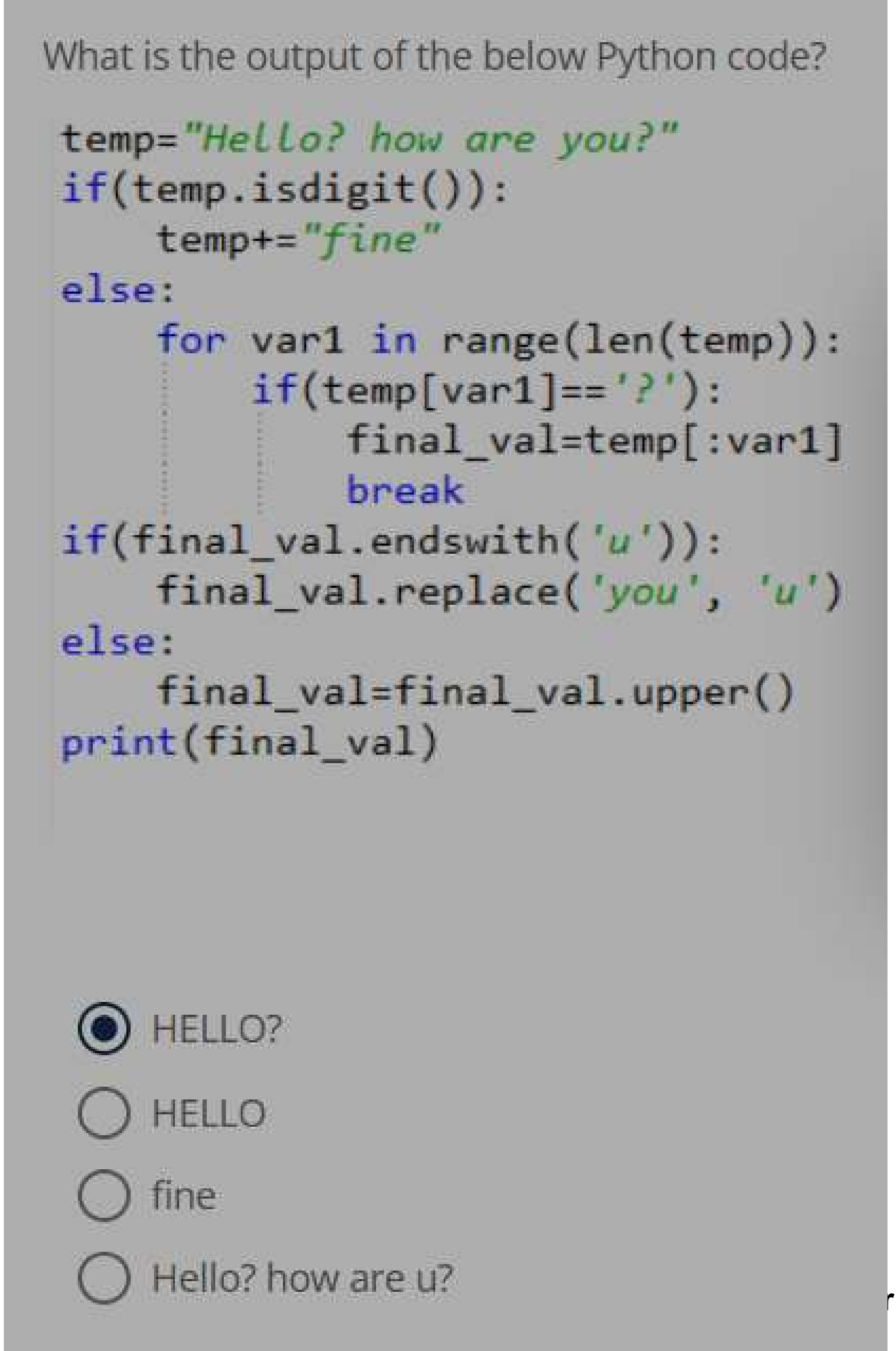
```
num1=11//10
num2=11%10
num3=20
num4=40
num5=5

if(num3>num4):
    if(num3>num5):
        print(num5*num4/num3)
    else:
        print(num3/num5)
else:
    if(num1==num2):
        print(num4/num3)
    else:
        print(num4/num5)
```

● 2.0

○ 4.0

○ 10.0

○ 8.0



What is the output of the below Python code?

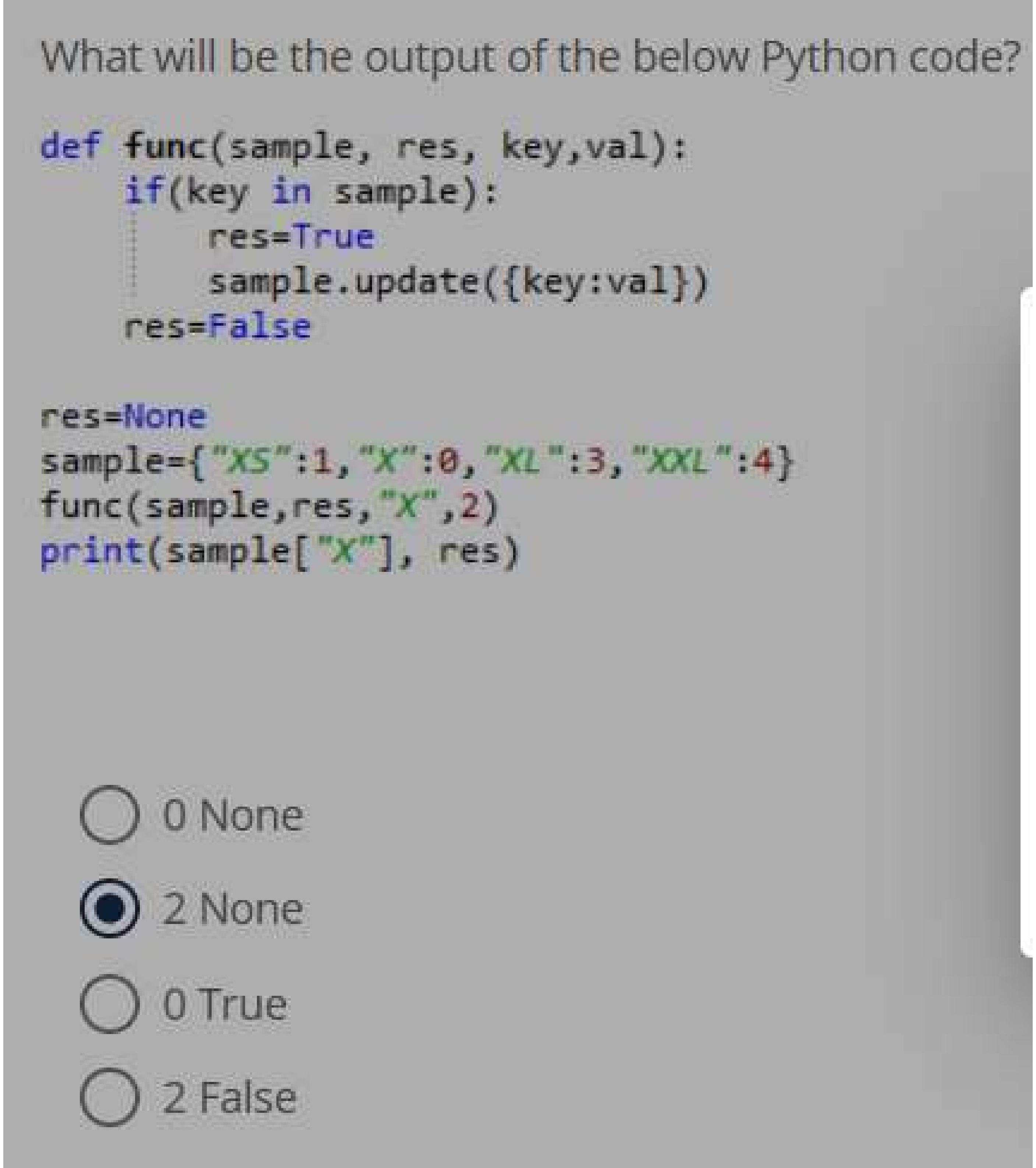
```
temp="Hello? how are you?"
if(temp.isdigit()):
    temp+="fine"
else:
    for var1 in range(len(temp)):
        if(temp[var1]=='?'):
            final_val=temp[:var1]
            break
if(final_val.endswith('u')):
    final_val.replace('you', 'u')
else:
    final_val=final_val.upper()
print(final_val)
```

● HELLO?

○ HELLO

○ fine

○ Hello? how are u?



What will be the output of the below Python code?

```
def func(sample, res, key,val):
    if(key in sample):
        res=True
        sample.update({key:val})
    res=False

res=None
sample={"XS":1,"X":0,"XL":3,"XXL":4}
func(sample,res,"X",2)
print(sample["X"], res)
```

○ 0 None

● 2 None

○ 0 True

○ 2 False