

Inftytg

Module 1

kunal bhardwaj

18SCSE1120011

DAY-1

Quiz 1

◀ ⌂ PROGRAMMING FUNDAMENTALS USING PYTHON

Q ≡ Quiz 1 ⌂

TC has to solve many problems as mentioned below.

can you connect the below questions to the mentioned categories of problems using the mouse?

How many flights have landed today?	Optimization
Should a flight land immediately or circle in air for some more time?	Sorting
Which runway is currently free?	Decision
Among the many flights ready for landing, the flight with the lowest fuel level should be allowed to land first. How can it be done?	Searching
1200 landings and takeoffs happen in a day with only 2 runways. How do you manage?	Counting

Your answers are submitted.

Quiz 2



LEARNING JOURNEY

CERTIFICATION

ALUMNI STORIES

CONTEST ARENA

GALLERY

GET TO KNOW US

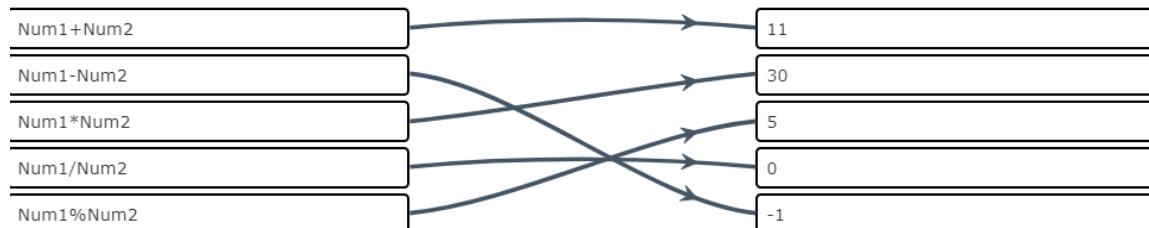
Q ≡ Quiz 2



3 min

Assume, Num1=5, Num2=6.

Match the output of the arithmetic expressions.



Submit

Reset

Your answer is Right



Considering Num1=5 and Num2=6

Num1+Num2 | 5+6 → 11

Quiz 3



≡ Quiz 3

Assume, Num1=5, Num2=6.

Match the output of the relational expressions.

Categories	Options
Num1 < Num2	True
Num1 <= Num2	True
Num1 > Num2	False
Num1 >= Num2	False
Num1 != Num2	True

Your answer is Right



Num1 < Num2	->	(5 < 6)	->	True
Num1 <= Num2	->	(5 <= 6)	->	True
Num1 > Num2	->	(5 > 6)	->	False
Num1 >= Num2	->	(5 >= 6)	->	False
Num1 != Num2	->	(5 != 6)	->	True

Your answers are submitted.

Quiz 4

Ex ≡ Quiz 4

Assume, Num1=5, Num2=6.

Match the output of the logical expressions.

Categories	Options
(Num1 < Num2) and (Num1 != Num2)	True
(Num2 >= Num1) or (Num1 > Num2)	True
not (Num1 == Num2)	True

Submit

✓ Your answer is Right



(Num1 < Num2) and (Num1 != Num2) -> (5 < 6) and (5 != 6) -> True and True -> True

(Num2 >= Num1) or (Num1 > Num2) -> (6 >= 5) or (5 > 6) -> True or False -> True

not(Num1==Num2) -> not(5==6) -> not(False) -> True

Hence this is the answer.



Your answers are submitted.

Exercise 1 level 1



PROGRAMMING FUNDAMENTALS USING PYTHON



≡ Exercise 1 - Level 1



3	Total number of seconds: 259200
5	Total number of seconds: 432000

Note: You can drag and drop the required number of pseudo-code magnets into the pseudo-code box.

Estimated Time: 10 minutes

Pseudo-code Magnets:

Seconds=No_Of_Days*60*60
Seconds=No_Of_Days*24*60
Seconds=No_Of_Days*60*60*60

Pseudo-code

input No_Of_Days
Seconds= No_Of_Days*24*60*60
display "Total number of seconds:",Seconds

Congratulations !!! Your answer is right.

Submit

Reset

Quiz 5

Quiz 5

The pseudo-code given below is written to identify the result of the football match held in the campus.

Choose the correct logic from the given drop down to complete the pseudo-code.

SELECTION

1. input My_Team_Goals
2. input Opponent_Team_Goals
3. if (My_Team_Goals > Opponent_Team_Goals) then
4. display "We won"
5. else if (My_Team_Goals < Opponent_Team_Goals) then
6. display "They won"
7. else
8. display "It's a tie"
9. end-if

Submit

 Your answer is Right

 Your answers are submitted.

Quiz 6

Quiz 6



 5 min

What is the outcome of the following pseudo-code?

```
1 | input Counter
2 | while(Counter<5) do
3 |   Counter=Counter+1
4 |   display Counter
5 | end-while
```

Pseudocode

Assume that the input value provided to variable, Counter is 1

- 2,3,4,5
- 2,3,4
- 1,2,3,4
- 1,2,3,4,5

Try again in 2

 Your answer is Right

 For this option to be correct, control should reach line 4 four times. While loop in line 2 executes for all values of Counter less than 5 and during each iteration, value of Counter is incremented by 1 and displayed.

Initial value of Counter being 1, control reaches line 4 four times displaying Counter values - 2,3,4 and 5.

Hence this is the answer.

 Your answers are submitted.



Exercise 2 level 2

Exercise 2 - Level 2

Pseudo-code:

```

for(counter= 0 ▾ , counter<= 5 ▾ , counter= counter+1 ▾ )
move Right ▾
end-for
for(counter= 0 ▾ , counter<= 6 ▾ , counter= counter+1 ▾ )
move Down ▾
end-for
for(counter= 0 ▾ , counter<= 5 ▾ , counter= counter+1 ▾ )
move Right ▾
end-for

```

Congratulations... You have reached the destination

Exercise 3 level 2

Exercise 3: Collaborative Exercise - Level 2

Estimated time: 20 minutes

Pseudo-code Magnets:

- add Tree
- display Nightsky
- display Sunset
- display Moon
- display Rain

Pseudo-code

```

display Daylight
display Snow
display Sunrise
for(Counter=[0 ▾ ], Counter<= [3 ▾ ], Counter=[Counter+1 ▾ ] )
add Sheep
end-for
for(Counter=[1 ▾ ], Counter<= [1 ▾ ], Counter=[Counter+1 ▾ ] )

```

Expected Canvas

Current Canvas

Congratulations !!! Your answer is right.

Reset **Submit**

Your answer has been submitted successfully.

Exercise 4 level 2



Exercise 4: Collaborative Exercise - Level 2



Pseudo-code Magnets:

```
display Sunrise  
display Snow  
display Sunset  
display Daylight
```

Pseudo-code

```
display Rain  
display Nightsky  
display Moon  
for(Counter=[0 ▾], Counter<= [2 ▾], Counter=[Counter+1 ▾] )  
  
add Mountain  
end-for  
for(Counter=[0 ▾], Counter<= [1 ▾], Counter=[Counter+1 ▾] )
```

Reset Submit

Expected Canvas Current Canvas



Congratulations !!! Your answer is right.

◀ Your answer has been submitted successfully. ▶

Exercise 5 level 2

Q = Exercise 5 - Level 2

Pseudo-code Magnets:

Pseudo-code

```
input Number  
if(Number==0) then  
Factorial=1  
else  
Factorial=1  
while(Number!=0) do  
Factorial=Factorial*Number  
Number=Number-1  
end-while  
end-if  
display Factorial
```

Congratulations !!! Your answer is right.

Submit Reset

Exercise 6 level 2

Your objective is to execute and submit the canvas where radius of circle is 60 which is 1/2 of rectangle width. Estimated Time: 10 minutes

```
Radius: 60 , Width: 240 , Height: 30
import turtle      # allows us to use the turtles library

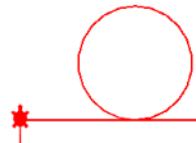
wn = turtle.Screen()    # creates a graphics window
wn.setup(500,440)       # set window dimension

circle_rad=60          # set the radius
rectangle_width=240    # set the width
rectangle_height=30     # set the height

alex = turtle.Turtle()  # create a turtle named alex
alex.shape("turtle")   # alex looks like a turtle
alex.color("red")       # alex has a color
alex.circle(circle_rad)
alex.backward(rectangle_width/2)
alex.forward(rectangle_width)
alex.right(90)
alex.forward(rectangle_height)
alex.right(90)
alex.forward(rectangle_width)
alex.right(90)
alex.forward(rectangle_height)
```

Run Code

Submit



Congratulations!!! You got it right.

Quiz 7

≡ Quiz 7

Match the following:

Questions	Options
True and True	True ▾
False and True	False ▾
1==1 and 2==1	False ▾
1==1 and 2!=1	True ▾
True and 1==1	True ▾
"Yes" == "Ok"	False ▾
not(True and False)	True ▾
not("Landed"=="Landed" and "Flight"=="F101")	True ▾
1==1 and (not(1==1 or 1==0))	False ▾

Submit

✓ Your answer is Right



True and True -> True
False and True -> False
1==1 and 2==1 -> True and False -> False
1==1 and 2!=1 -> True and True -> True
True and 1==1 -> True and True -> True
"Yes" == "Ok" -> False because "Yes" is not equal to "Ok"

Your answers are submitted.

Quiz 8



Quiz 8



5

Assume that there are five variables with the values given below:

```
num1=10  
num2=5  
num3=0  
num4=2  
num5=10  
(num1==num5) and ((num2-num4*num3) == (num2-num3))
```

Which among the expressions provide the same result as the above expression?

- not(num3>=num4) and (num5/num2 == num4)
- (num2-num4*num3) <= ((num2-num4)*num3)
- not(num5>num4) or (num4+num2)>num1
- (num1==num5) and (not(num5/num2 == num1/num2))

Submit

Your answer is Right



Considering num1=10, num2=5, num3=0, num4=2 and num5=10

(num1==num5) and ((num2-num4*num3) == (num2-num3))
(10==10) and (5 -2*0) == (5-0)
True and (5 == 5)
True and True
True

not(num3>=num4) and (num5/num2 == num4)
not(0>=2) and (10/5==2)
not(False) and (2 == 2)
True and True
True

Hence this is the answer.

Your answers are submitted.

Quiz 9



Quiz 9

What is the output of the below code snippet?

```
1 | num1 = 10  
2 | num2 = 5  
3 | num2 *= num1  
4 | print(num2)
```

[Python](#) [Copy](#)**Options:**

- 50
- 10
- 25
- 100

Submit

Your answer is Right



Considering num1=10 and num2=5

Line 3: num2*=num1 -> num2 = num2*num1 -> num2 = 50

Hence this is the answer.

Quiz 10

What is the output of the below code snippet?

```
1 num1 = 50
2 num2 = 2
3 num3 = 3
4 num4 = 8
5 result = num1/num4-num3*num2+num4
6 print(result)
```

Python Copy

Options:

8.25
 100
 14.5
 -23.75

Submit

 Your answer is Right

 Substitute the values of num1, num2, num3 and num4
result = num1/num4-num3*num2+num4
= 50/8-3*2+8
= 6.25-3*2+8
= 6.25-6+8
= 0.25+8
= 8.25

Hence this is the answer

 Your answers are submitted.

Assignment 1



Assignment 1: Collaborative Assignment - Level 1

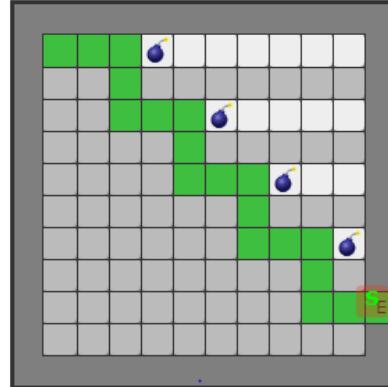
Estimated Time: 20 minutes

Pseudo-code Magnets:

```
move Right ▾  
end-while  
else  
if(Is_Next_Block_Bomb) then  
while(start != end) do  
end-if
```

Pseudo-code:

```
while(start != end) do  
move Right ▾  
if(Is_Next_Block_Bomb) then  
move Down ▾  
move Down ▾  
end-if  
end-while
```



Congratulations... You have reached the destination



Your answer has been submitted successfully.

Assignment 2



PROGRAMMING FUNDAMENTALS USING PYTHON



Assignment 2: Collaborative Assignment - Level 2

Note: You can use the drag and drop option provided below to create the appropriate pseudo-code from the set of statements provided.

Estimated Time: 20 minutes

Pseudo-code Magnets:

Pseudo-code

```
input Number1,Number2,Number3  
if(Number1 < Number2) then  
if(Number1 < Number3) then  
display "Num1 is the smallest"  
else  
display "Num3 is the smallest"  
end-if  
else if(Number2 < Number3) then  
display "Num2 is the smallest"  
else  
display "Num3 is the smallest"  
end-if
```

Congratulations !!! Your answer is right.



Your solution has been submitted.



Assignment 3

Assignment 3: Collaborative Assignment - Level 2

Question Submission

Code pane:

```
1 #This verification is based on string match.
2
3 mileage=12
4 amount_per_litre=40
5 distance_one_way=190
6 per_head_cost=0
7 divisible_by_five=False
8
9
10
11 total=((amount_per_litre/mileage)*(distance_one_way*2))
12 per_head_cost=(total/4)
13 if(per_head_cost%5==0):
14     divisible_by_five=True
15
16 #Do not modify the below print statements for verification to work
17 print(per_head_cost)
18 print(divisible_by_five)
```

Verify Submit Python Visualize Execute

Result Pane:
316.6666666666667
False

Assignment 4

Assignment 4: Mandatory - Level 1

Question Submission

Code pane:

```
1 #PF-Assgn-4
2 #This verification is based on string match.
3
4 principal=7800
5 rate_of_interest=7.7
6 time=26
7 interest=0
8
9 interest=((principal * rate_of_interest * time)/100)
10
11
12 print(interest)
```

Verify Submit Python Visualize Execute

Result Pane:
15615.6

Assignment 5

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 5: Mandatory - Level 2

Use the drag and drop option provided to create the correct pseudo code.

Note: This page has system assisted problem solving. Interactions would come to your help if you wait at any step or if you make a mistake. We encourage you to try different logic variations.

Possible Pseudo-code Magnets

Your Answer

```
input Year
if(Year%4==0 and Year%100!=0) then
    display "It is a leap year"
else if(Year%400==0) then
    display "It is a leap year"
else
    display "It is not a leap year"
end-if
```

Congratulations !!! Your answer is right.

Submit **Reset**

Your solution has been submitted.

assignment 6

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 6: Mandatory - Level 2

Pseudo-code Magnets:

```
Remainder=Number/10
Reverse=Remainder*10+Reverse
while(Number!=0) do
    Number=Number%10
```

Pseudo-code

```
input Number
Temp=Number
Reverse=0
while(Number!=0) do
    Remainder=Number%10
    Reverse=Reverse*10+Remainder
    Number=Number/10
end-while
if(Temp==Reverse) then
    display "Palindrome"
else
    display "Not a Palindrome"
end-if
```

Congratulations !!! Your answer is right.

Your solution has been submitted.

assignment 7

Assignment 7: Mandatory - Level 2



4. It should continue accepting numbers as long as the user wants to provide an input and should display the final sum.

Note: You can drag and drop the pseudo-code magnets to the pseudo-code step boxes and create the appropriate pseudo-code.

Estimated Time: 20 minutes

Pseudo-code Magnets:

```
if(Number/4==0) then  
while(Choice=='No') do
```

Pseudo-code

```
Sum=0  
Choice='Yes'  
while(Choice=='Yes') do  
    input Number  
    if(Number%4==0) then  
        Sum=Sum+Number  
    end-if  
    display "Do you want to continue? (Enter Yes or No)"  
    input Choice  
end-while  
display Sum
```

Submit

Reset

◀ **Congratulations !!! Your answer is right.**

assignment 8

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 8 - Level 2



Pseudo-code Magnets:

```
Sum=Sum+Number*Number*Number  
Number=Number%10  
while(Number==0) do  
if(Number==Sum) then
```

Pseudo-code

```
input Number  
Sum=0  
Temp=Number  
while(Number!=0) do  
    Remainder=Number%10  
    Sum=Sum+Remainder*Remainder*Remainder  
    Number=Number/10  
end-while  
if(Temp==Sum) then  
    display "This is an Armstrong Number"  
else  
    display "This is not an Armstrong Number"  
end-if
```

Congratulations !!! Your answer is right.

Submit

Reset

◀ **Your solution has been submitted.**

assignment 9

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 9 - Level 3

Pseudo-code Magnets:

```

end-if
Unlock Lock
else if(Diffuser_Found) then
Diffuse Bombs
else if(Left_Turn_Available) then
Turn Right
if(Key_Found) then
end-if
else
if(Path_Ahead_Available) then
end-while
move forward
while(start != end) do

```

Pseudo-code:

```

while(start != end) do
if(Path_Ahead_Available) then
move forward
else if(Left_Turn_Available) then
Turn Left
end-if
if(Key_Found) then
Unlock Lock
else if(Diffuser_Found) then
Diffuse Bombs
end-if
end-while

```

Congratulations... You have reached the destination

[Submit](#) [Clear](#) [Reset](#)

assignment 10

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 10 - Level 2

```

add Tree
display Moon
display Snow
display Sunset
display Rain
display Sunrise

```

```

add Mountain
end-for
for(Counter=[0 ▾], Counter<=[2 ▾], Counter=[Counter+1 ▾] )
add Sheep
end-for

```

[Reset](#)
[Submit](#)

Expected Canvas

Current Canvas

Congratulations !!! Your answer is right.

assignment 11

Assignment 11 - Level 2

Pseudo-code Magnets:

```
display Sunrise
display Daylight
display Sunset
display Rain
```

```
display Snow
display Nightsky
display Moon
for(Counter=[1 ▾], Counter<=[1 ▾], Counter=[Counter+1 ▾])
    add Mountain
    add Sheep
end-for
for(Counter=[0 ▾], Counter<=[2 ▾], Counter=[Counter+1 ▾])
```

Reset Submit

Expected Canvas
Current Canvas




Congratulations !!! Your answer is right.

Your answer has been submitted successfully.

assignment 12

Assignment 12 - Level 2



Estimated Time: 10 minutes

Run Code

```
8 ...
9 ...
10 alex.circle(50)          # draws a circle of r
11 alex.backward(50)          # alex moves 50 posit
12 alex.forward(50)           # alex moves 50 posit
13 alex.right(60)             # alex turns 60 degree
14 alex.left(60)              # alex turns 60 degree
15 ...
16
17 #Write the logic to draw the given pattern
18 #Refer the statements given above to draw the patt
19
20 alex.circle(50)
21 alex.forward(100)
22 alex.left(90)
23 alex.forward(100)
24 alex.left(90)
25 alex.forward(200)
26 alex.left(90)
27 alex.forward(100)
```



assignment 13



Assignment 13 - Level 2



Write a pseudo-code which helps (O>) to reach (E).

Note: You can drag and drop the pseudo-code magnets to the pseudo-code box and create the appropriate pseudo-code.

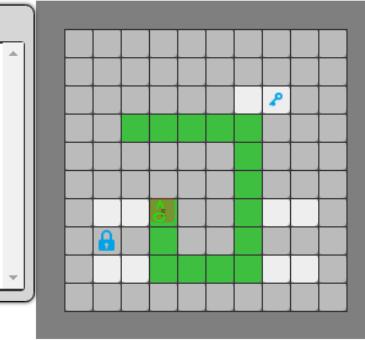
Estimated Time: 20 minutes

Pseudo-code Magnets:

```
if(Right_Turn_Available) then  
Unlock Blue Lock  
end-while  
move forward  
end-if  
else if(Blue_Key_Found) then  
Turn Right  
if(Red_Key_Found) then  
while(start != end) do  
end-if  
Unlock Red Lock
```

Pseudo-code:

```
while(start != end) do  
move forward  
if(Right_Turn_Available) then  
Turn Right  
end-if  
if(Red_Key_Found) then  
Unlock Red Lock  
else if(Blue_Key_Found) then  
Unlock Blue Lock  
end-if  
end-while
```



Congratulations.... You have reached the destination

Submit

Clear

Reset

Your answer has been submitted successfully.

assignment 14



Assignment 14 - Level 3



Note: You can use the drag and drop option provided below to create the appropriate pseudo-code from the set of statements provided.

Estimated Time: 20 minutes

Pseudo-code Magnets:

```
else  
end-for  
end-if  
else if(Score %2==0) then  
if(Score>=85) then  
end-if  
if(Score>90)then  
else if(Score/7==0) then
```

Pseudo-code:

```
Scholarship#0  
for (Counter=1, Counter<=500, Counter=Counter+1)  
input Branch,_Of_Study,Score,Course_Fee  
if(Branch,_Of_Study=="Arts") then  
if(Score>=90)then  
Scholarship#50  
else if(Score%2!=0) then  
Scholarship#5  
end-if  
else if(Branch,_Of_Study=="Engineering") then  
if(Score>85) then  
Scholarship#50  
else if(Score%7==0) then  
Scholarship#5  
end-if  
end-if  
Scholarship_Amount=Course_Fee*Scholarship/100  
Final_Fee=Course_Fee - Scholarship_Amount  
display Final_Fee  
end-for
```

Congratulations !!! Your answer is right.

Submit

Reset

Your solution has been submitted.

DAY-2

Exercise 7 level1

Exercise 7: Collaborative Exercise - Level 1

Test the program with different input values for number of adults and children.
Estimated time: 15 minutes

Sample Input		Expected Output
Number of adults	Number of children	
5	2	Total Ticket Cost: 204910.35
3	1	Total Ticket Cost: 120535.5

```
Code pane:  
3 def calculate_total_ticket_cost(no_of_adults, no_of_children):  
4     total_ticket_cost=0  
5     rate_adult=37550  
6     rate_child=(rate_adult/3)  
7     service_tax=((rate_adult+rate_child)*7)/100  
8     final_ticket=(rate_child+rate_adult+service_tax)  
9     discount=((final_ticket*10)/100)  
10    total_ticket_cost=(final_ticket-discount)  
11    return total_ticket_cost  
12  
13 #Provide different values for no_of_adults, no_of_children and test your  
14 #program  
15 total_ticket_cost=calculate_total_ticket_cost(1,2)
```

Verify Submit

 Python

Visualize Execute

Result Pane:

Exercise 10

 Apps  What's twisted pair...  Watch Yesterday (2...)  Gmail  YouTube  Maps



LEARNING JOURNEY

CERTIFICATION

ALUMNI STORIES

CONTEST ARENA

GALLERY

GET TO KNOW US



PROGRAMMING FUNDAMENTALS USING PYTHON

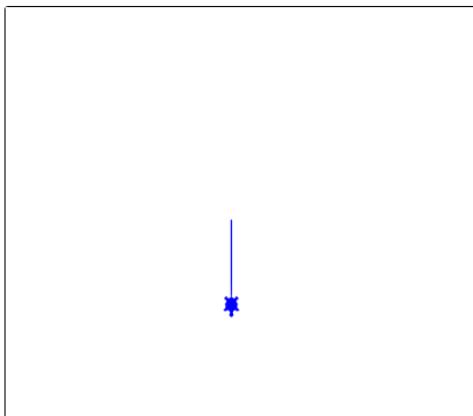
Exercise 10 - Level 1

Result Pane:   

Estimated Time: 15 minutes

Run Code

```
alex.left(60)          # alex turns 60 degrees  
alex.write("Hello")    # alex says "Hello"  
"  
#Write the logic to take the turtle to its destination  
#Refer the statements given above to draw the pattern  
#Provide different values and test your program  
destination="south"  
if(destination=="south"):  
    alex.right(90)  
    alex.forward(100)  
  
elif(destination=="north"):  
    alex.left(90)  
    alex.forward(100)  
  
elif(destination=="east"):  
    alex.forward(100)  
  
elif(destination=="west"):  
    alex.backward(100)
```



Quiz 11



What is the output of the below code snippet?

```
1 num1=100
2 num2=200
3 num3=6
4 if(5==num3):
5     if(num1>100 or num2>150):
6         print("1")
7     elif(num1==100 and num2>150):
8         print("2")
9     else:
10        print("3")
```

Options: 1 2 3**Submit**

Your answer is Right



Considering num1=100, num2=200, num3=6.
For '2' to be printed, control should reach line 8.

Line 8 is reached when the 'if' statement in line 4 evaluate to false and 'elif' statement in line 7 evaluate to true.
Line 4 is evaluating to false and line 7 is evaluating to true.
Hence this is the answer.

quiz 12



What should be the value of num1 and num2 to get the output as "1"?

10 min

```
1 if((num1/num2==5) and (num1+num2)>5):
2     print("1")
3 elif((num1-num2)<=1 or (num1%num2)==0):
4     print("2")
5 else:
6     print("3")
```

Options: num1=11, num2=2 num1=0, num2=5 num1=5, num2=1 num1=-10,num2=2**Submit**

Your answer is Right

For "1" to be printed, if statement in line 1 should evaluate to true.
With num1=5 and num2=1, it is evaluating to true.
Hence this is the answer

Your answers are submitted.

quiz 13

Quiz 13

Which among the following codes have equivalent logic?

10 min

Code1:

```
1 if(value3>1000 and value3<1006):
2     if(value1=="ABC"):
3         if(value2=="A"):
4             value4=10
5         else:
6             value4=8
7     elif(value1=="XYZ"):
8         if(value2=="A"):
9             value4=8
10    else:
11        value4=6
12    print(value4)
```

Code2:

```
1 if(value3>1001 and value3<=1005 and val
2     if(value2=="A"):
3         value4=10
4     else:
5         value4=8
6 elif(value3>1000 and value3<1006 and val
7     if(value2=="A"):
8         value4=8
9     else:
10    value4=6
11    print(value4)
```

Code3:

```
1 if(value3>1000 and value3<1006 or value1
2     if(value2=="A"):
3         value4=10
4     else:
5         value4=8
6 elif(value3>1000 and value3<1006 or val
7     if(value2=="A"):
8         value4=8
9     else:
10    value4=6
11    print(value4)
```

Options:

- Code2,Code3
- Code1,Code3
- Code1,Code2

Submit

 Your answer is Right

 The conditions that must be satisfied in order to print 10, 8 or 6 in line 12 of Code 1 and line 11 of Code 2 are exactly the same for both the codes. That means these two codes have equivalent logic.
Hence this is the answer.

Your answers are submitted.

quiz 14

Quiz 14

What is the output of the code given below?

```
1 a = -10
2 b = -200
3 c = 2000
4 d = 4000
5 if( a*b >=d):
6     if(d>c):
7         if(d%c!=0):
8             print(11)
9         else:
10            print(22)
11 else:
12     if(b/a >0):
13         if(a<b or d%c!=0):
14             print(33)
15         else:
16             print(44)
```

Options:

- 11
- 22
- 44
- 33

Submit

 Your answer is Right

 For '44' to be printed, control should reach line 16.

Line 16 is reached when line 5 evaluates to false, line 12 evaluates to true and line 13 evaluates to false.

Line 5: if(a*b >=d) -> if(-10*-200>=4000) -> if(2000>4000) is evaluating to false.

Your answers are submitted.

Exercise11 level1

PROGRAMMING FUNDAMENTALS USING PYTHON

Exercise 11: Collaborative Exercise - Level 1

Question Submission

Code pane:

```

1 #PF-Exer-11-
2
3 def display(num):
4     message=""
5     if((num % 3 ==0) and( num % 5==0)):
6         message="Zoom"
7     elif (num % 3 == 0):
8         message="Zip"
9     elif(num % 5==0):
10        message="Zap"
11    else:
12        message="Invalid"
13    return message
14
15 #Provide different values for num and test your program
16

```

Verify Submit Python Visualize Execute

Result Pane:

8 out of 8 test cases passed.

1 out of 1 structural test cases passed.

7 out of 7 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
N/A	Structural	1	find_product(num1,num2,num3)	N/A	N/A	N/A	✓

Assignment 15-21

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 15: Collaborative Assignment - Level 1

Verify Submit Python Visualize Execute

Result Pane:

7 out of 7 test cases passed.

1 out of 1 structural test cases passed.

6 out of 6 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
N/A	Structural	1	find_product(num1,num2,num3)	N/A	N/A	N/A	✓

Assignment 16



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PROGRAMMING FUNDAMENTALS USING



Assignment 16: Collaborative Assignment - Level 2

Question

Submission

Code pane:

```
1 APF-Assign-16
2 def make_amount(rupees_to_make,no_of_five,no_of_one):
3     five_needed=0
4     one_needed=0
5
6     #Start writing your code here
7     #Populate the variables: five_needed and one_needed
8     five_needed=no_of_five
9     one_needed=rupees_to_make-five_needed
10    if(no_needed<no_of_one):
11        print(-1)
12    else:
13        print("No. of Five needed : ", five_needed)
14        print("No. of One needed : ", one_needed)
15    # Use the below given print statements to display the output
16    # Also, do not modify them for verification to work
17
18    print("No. of Five needed : ", five_needed)
19    print("No. of One needed : ", one_needed)
```

Verify

Submit



Python

Visualize

Try again in 1

Result Pane:

Could not execute. Try again later.

 Assignment 17: Mandatory - Level 1[Problem Statement](#) [Submission](#) [Test the program](#)

Code pane:

```
1 #PF-Tryout
2
3+ def find_new_salary(current_salary,job_level):
4+     # write your logic here
5+     prcnt=0
6+     if(job_level==3):
7+         prcnt=15
8+     elif(job_level==4):
9+         prcnt=7
10+    elif(job_level==5):
11+        prcnt=5
12+    new_salary=current_salary+(current_salary*prcnt/100)
13+
14+
15# provide different values for current_salary and job_level and test your program
16new_salary=find_new_salary(15000,3)
17print(new_salary)
```

[Submit](#) Python[Visualize](#)[Execute](#)

Result Pane:

17250.0

Your code has been submitted.

 Assignment 18: Mandatory - Level 2[Problem Statement](#) [Submission](#) [Test the program](#)

Code pane:

```
1 #PF-Tryout
2
3+ def convert_currency(amount_needed_inr,current_currency_name):
4+     current_currency_amount=0
5+     #write your logic here
6+     eqvInr=0
7+     if(current_currency_name=="Euro"):
8+         eqvInr=0.01417
9+     elif(current_currency_name=="British Pound"):
10+        eqvInr=0.01417
11+    elif(current_currency_name=="Australian Dollar"):
12+        eqvInr=0.02140
13+    elif(current_currency_name=="Canadian Dollar"):
14+        eqvInr=0.02027
15+    current_currency_amount=amount_needed_inr*eqvInr
16+
17+
18# provide different values for amount_needed_inr and current_currency_name and test your program
19
```

[Submit](#) Python[Visualize](#)[Execute](#)

Result Pane:

35.0

Your code has been submitted.



Assignment 19: Mandatory - Level 3

Question Submission

```

1 #PF-Assgn-19
2
3 def calculate_bill_amount(food_type,quantity_ordered,distance_in_kms):
4     bill_amount=0
5     #Write your logic here
6     if((food_type=="N" or food_type=="V") and quantity_ordered>=1 and
7         distance_in_kms>0):
8         if(food_type=="N"):
9             bill_amount+=50*quantity_ordered
10            else:
11                bill_amount+=52*quantity_ordered
12                temp=distance_in_kms-3;
13
14                if(temp>0):
15                    if(temp<=3):
16                        bill_amount+=3*temp
17                    elif(temp>3):
18                        bill_amount+=5*3
19
20

```

Verify Submit



Visualize

Execute

Result Pane:

14 out of 14 test cases passed.

1 out of 1 structural test cases passed.

13 out of 13 logical test cases passed.

Test

Your code has been submitted.

Assignment 20 - Level 3

Question Submission

Code pane:

```

1 #PF-Assgn-26
2
3 def calculate_loan(account_number,salary,account_balance,loan_type,
4 ,loan_amount_expected,customer_emi_expected):
5     eligible_loan_amount=0
6     bank_emi_expected=0
7     eligible_loan_amount=8
8
9     if account_number>999 and account_number<2000:
10        if account_balance>=100000:
11            if salary>25000 and loan_type=="Car":
12                eligible_loan_amount=500000
13                bank_emi_expected=36
14                if loan_amount_expected<eligible_loan_amount and
15                    customer_emi_expected<=bank_emi_expected:
16                    print("Account number:", account_number)
17                    print("The customer can avail the amount of Rs.", ,
18                         eligible_loan_amount)
19
20

```

Verify Submit



Visualize

Execute

Result Pane:

20 out of 20 test cases passed.

1 out of 1 structural test cases passed.

19 out of 19 logical test cases passed.

Test

Assignment 21 - Level 3

Problem Statement Submission Test the program

Code pane:

```
1 #PF-Tryout:  
2  
3 def generate_next_date(day,month,year):  
4     #Start writing your code here:  
5  
6     if (year % 400 == 0):  
7         leap_year = True  
8     elif (year % 100 == 0):  
9         leap_year = False  
10    elif (year % 4 == 0):  
11        leap_year = True  
12    else:  
13        leap_year = False  
14  
15    if month in (1, 3, 5, 7, 8, 10, 12):  
16        ...  
17  
18
```

Submit

Python

Visualize

Execute

Result Pane:

```
23 3 2011
```

Your code has been submitted.

DAY3

Assignment 22-28



Assignment 22: Collaborative Assignment – Level 2



Code pane:

```
1 def find_leap_years(given_year):  
2     list_of_leap_years = []  
3     while len(list_of_leap_years) != 15:  
4         if given_year % 4 == 0:  
5             if given_year % 100 == 0:  
6                 if given_year % 400 == 0:  
7                     list_of_leap_years.append(given_year)  
8                 else:  
9                     list_of_leap_years.append(given_year)  
10                given_year = given_year + 1  
11            return list_of_leap_years  
12        list_of_leap_years = find_leap_years(2000)  
13    print(list_of_leap_years)
```

Verify**Submit****Visualize****Execute**

Result Pane:

[2000, 2004, 2008, 2012, 2016, 2020, 2024, 2028, 2032, 2036, 2040, 2044, 2048, 2]

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 23: Collaborative Assignment - Level 2

```

45 #list of gems required by the customer
46 reqd_gems=["Ivory","Emerald","Garnet"]
47
48 #Quantity of gems required by the customer. reqd_gems and reqd_quantity
#have one-to-one correspondence
49 reqd_quantity=[3,10,12]
50
51 bill_amount=calculate_bill_amount(gems_list, price_list, reqd_gems,
reqd_quantity)
52 print(bill_amount)

```

Verify Submit Python Visualize Execute

Result Pane:

8 out of 8 test cases passed.
1 out of 1 structural test cases passed.
7 out of 7 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
N/A	Structural	1	calculate_bill_amount(gems_list,price_list,reqd_gems,reqd_quantity)	N/A	N/A	N/A	✓

Assignment 24: Mandatory (puzzle) Level 1

Problem Statement Starter Testcase Submission

Code pane:

```

1 #PF-Assgn-24
2 def form_triangle(num1,num2,num3):
3     """#Do not change the messages provided below
4     """
5     success="Triangle can be formed"
6     failure="Triangle can't be formed"
7     if num1<num2+num3 and num2<num1+num3 and num3<num1+num2:
8         return print(success)
9     else:
10        return print(failure)
11     #write your logic here
12
13     #use the following messages to return the result wherever necessary
14
15

```

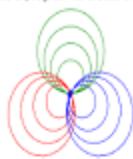
Verify Submit Python Visualize Execute

Result Pane:

Triangle can be formed

 Assignment 27 - Level 2

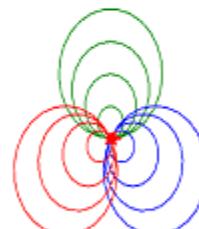
Write a program to create the following pattern:



Estimated Time: 15 minutes

Run Code

```
1 import turtle           # allows us to use the turtle
2 wn = turtle.Screen()    # creates a graphics window
3 wn.setup(500,500)        # set window dimension
4
5 alex = turtle.Turtle()   # create a turtle named alex
6 alex.shape("turtle")     # alex looks like a turtle
7
8
9 alex.color("green")# alex has a color
10 alex.right(60) # alex turns 60 degrees right
11 alex.left(60) # alex turns 60 degrees left
12 color = ["green", "blue", "red"]
13 for i in range(0,3):
14     alex.color(color[i])
15     for counter in range(1,5):
16         alex.circle(20*counter)
17         alex.right(120)
18         alex.left(60)
```



Assignment 28 - Level 2

Question Submission

Code pane:

```
1 #PF-Assgn-28
2
3 def find_max(num1, num2):
4     lis1=[]
5     if num1<num2:
6         for i in range(num1,num2+1):
7             if i%3==0 and i%5==0 and len(str(i))==2:
8                 lis1.append(i)
9     if len(lis1)==0:
10        return -1
11    else:
12        return max(lis1)
13 else:
14     return -1
15
16
17
```

Verify

Submit



Python

Visualize

Execute

Result Pane:

8 out of 8 test cases passed.

1 out of 1 structural test cases passed.

7 out of 7 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
N/A	Structural	1	find_max(num1,num 2)	N/A	N/A	N/A	✓

DAY 4

quiz and exercise

Quiz 23

Consider the following list of pan card numbers:
pancard_list=["AABGT6715H", "UFFAC4352T", "IFSBD9163K", "JOOEC1225H", "RWXAFE187B"]

What is the output of the below two print statements?

```
1 | print(pancard_list[3][6], end=" ")
2 |
3 | print(pancard_list[4][3:])
```

9 OEC1225H
 2 AFE187B
 9163K O
 225H A

Submit

Your answer is Right

pancard_list[3][6] – prints the character at the 6th index position of word at 3rd index position of pancard_list
pancard_list[4][3:] – prints all characters from the 3rd index position till the end of the word at 4th index position of pancard_list
Hence this is the answer.

Your answers are submitted.



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PROGRAMMING FUNDAMENTALS USING PYTHON

Quiz 24

What is the output of the code given below?

```
1 | message="welcome to Mysore"
2 | word=message[-7:]
3 | if(word=="mysore"):
4 |     print("got it")
5 | else:
6 |     message=message[3:14]
7 |     print(message)
```

got it
 come to Mys
 come to Myso
 lcome to Mys
 lcome to Myso

Submit

Your answer is Right

In this option, line 7 prints 'come to Mys'.
Line 2 slices the message and assigns 'Mysore' to word.
If statement in line 3 evaluates to false as " mysore" is not equal to "Mysore" and control flows to line 6.
Line 6, slices the original message and assigns "come to Mys" to message thereby printing 'come to Mys' in line 7.
Hence this is the answer.

Your answers are submitted.



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PROGRAMMING FUNDAMENTALS USING PYTHON

Exercise 22: Collaborative Exercise - Level 2

```
15
16     ... return ticket_number_list
17
18 print(generate_ticket("AI", "Bangalore", "London", 7))|
```

Verify Submit Python Visualize Execute

Result Pane:

6 out of 6 test cases passed.

1 out of 1 structural test cases passed.

5 out of 5 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
N/A	Structural	1	generate_ticket(airline,source,destination,no_of_passengers)	N/A	N/A	N/A	✓

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PROGRAMMING FUNDAMENTALS USING PYTHON

Exercise 23: Collaborative Exercise - Level 1

```
9 english_words_list=[ "merry" , "christmas" ]
10 print("The bilingual dict is:",bilingual_dict)
11 print("The english words are:",english_words_list)
12
13 swedish_words_list=translate(bilingual_dict, english_words_list)
14 print("The equivalent swedish words are:",swedish_words_list)|
```

Verify Submit Python Visualize Execute

Result Pane:

5 out of 5 test cases passed.

1 out of 1 structural test cases passed.

4 out of 4 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
N/A	Structural	1	translate(bilingual_dict,english_words_list)	N/A	N/A	N/A	✓

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PROGRAMMING FUNDAMENTALS USING PYTHON



Quiz 25



Which among the following statements are CORRECT with respect to functions?

- It is a section of a program that performs a specific task
- It helps to clearly separate tasks within a program
- Control can be transferred back and forth between different functions based on need
- It helps to achieve modularity
- It supports reusability

Submit

Your answer is Right

Function is a block of code that performs a specific task. When a function is invoked, control goes into the function, executes the block of code inside it and returns back to the calling block. Thus it can be invoked from anywhere, any number of times supporting reusability and allows to clearly separate tasks within a program achieving modularity.

Thus all options are True about functions, hence this is the answer.



Your answers are submitted.

Activate Windows

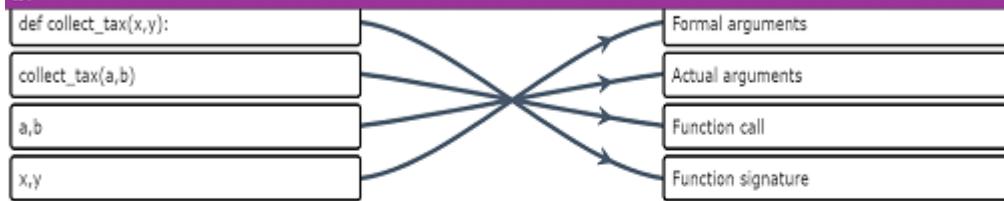
Go to Settings to activate



Quiz 26



Program

**Submit****Reset**

Your answer is Right



def collect_tax(x,y); Function signature defines the function name and required arguments

collect_tax(a,b) This invokes the function passing along the required parameter values

a,b They are actual arguments that hold values passed to the function.

x,y They are formal arguments which receive the values passed through a function call.

Hence this is the answer.



Your answers are submitted.





Quiz 27



Programming

Choose the most appropriate function call needed at line 4 to get the output as 'Result: 4'.

Estimated Time: 5 minutes

```
1 def check_value(message,num):  
2     msg=message[:num]  
3     return len(msg)  
4  
5 #function call statement  
6 print("Result:", result)
```

[Python](#)[Copy](#)

- result=check_value('Infosys',3)
- result=check_value(4,'Infosys')
- result=check_value('Infosys',len('Infosys'))
- result=check_value('Infosys',4)
- result=check_value('Infosys',5)

[Submit](#)

Your answer is Right

In this option, function `check_value()` is invoked by passing a string ('Infosys') followed by an integer(4).
Inside the function, line 2, assigns the value 'Info' to `msg` thereby returning 4 to the calling block.
Hence this is the answer.

Your answers are submitted.



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← ⏪ PROGRAMMING FUNDAMENTALS USING PYTHON

Quiz 28

Submit

```

11     print("Inside Func3")
12     num=func2()
13     num=num*5
14     return num
15
16 val=func3()
17 print(val)

```

Programming

Your answer is Right

```

graph TD
    L13["L13: val=func3()"] --> Func3
    Func3["Func3  
L9: Prints \"Inside Func3\"  
L10: num=func2()  
L11: Updates num to 50  
L12: Returns num[50] to line 13"]
    Func3 --> Func2
    Func2["Func2  
L5: Prints \"Inside Func2\"  
L6: num=func1()  
L7: Returns num [10] to line 10 in func1"]
    Func2 --> Func1
    Func1["Func1  
L2: Prints \"Inside Func1\"  
L3: Returns 10 to Line 6 in func2"]

```

L13 indicates Line 13

Hence this is the answer.

Your answers are submitted.

← ⏪ PROGRAMMING FUNDAMENTALS USING PYTHON

Quiz 29

B C

Submit

```

1 def verify(num1,num2):
2     if num1 > num2:
3         return num1
4     elif num1 == num2:
5         return 1
6     else:
7         return num2
8
9 def display(arg1,arg2):
10    if(verify(arg1,arg2)==arg1):
11        print("A")
12    elif(verify(arg1,arg2)==1):
13        print("C")
14    else:
15        print("B")
16
17 display(1000,3500)

```

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Your answer is Right

assignment from 29-33

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PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 29: Level 1

Problem Statement Starter Testcase Submission

Code pane:

```

1 def calculate(distance,no_of_passengers):
2     fuel_price_per_litre=70
3     mileage_per_litre=10
4     ticket_price=80
5     expenditure=(distance/mileage_per_litre)*fuel_price_per_litre
6     income=no_of_passengers*ticket_price
7     if income>expenditure:
8         return income-expenditure
9     else:
10        return -1
11
12
13 distance=20
14 no_of_passengers=50
15 print(calculate(distance,no_of_passengers))

```

Verify Submit Python Visualize Execute

Result Pane:
3860.0

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PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 30: Level 2

Code pane:

```

10 res=res+str(count)+current_char
11 count+=1
12 res=res+str(count)+message[-1]
13 return res
14
15 #Provide different values for message and test your program
16 encoded_message=encode("AABBBBBBC") #ABBBBCCCCCCCAB
17 print(encoded_message)

```

Verify Submit Python Visualize Execute

Result Pane:
6 out of 6 test cases passed.
1 out of 1 structural test cases passed.
5 out of 5 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
N/A	Structural	1	encode(message)	N/A	N/A	N/A	✓

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PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 31: Level 1

Problem Statement Starter Testcase Submission

Code pane:

```
1 def check_palindrome(word):  
2     temp=word[::-1]  
3     if word==temp:  
4         return True  
5     else:  
6         return False  
7  
8 status=check_palindrome("MAN")  
9 if(status):  
10    print("word is palindrome")  
11 else:  
12    print("word is not palindrome")
```

Verify Submit Python Visualize Execute

Result Pane: word is not palindrome

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PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 32: Mandatory - Level 3

Problem Statement Starter Testcase Submission

Code pane:

```
8     speciality= medical_speciality['P']  
9     elif E>0:  
10        speciality= medical_speciality['E']  
11     else:  
12        speciality= medical_speciality['O']  
13  
14     return speciality  
15  
16 #provide different values in the list and test your program  
17 patient_medical_speciality_list=[301,'O',302, 'O' ,305, 'O' ,401, 'E'-  
     ,656, 'E']  
18 medical_speciality={"P":"Pediatrics","O":"Orthopedics","E":"ENT"}  
19 speciality=max_visited_speciality(patient_medical_speciality_list  
     ,medical_speciality)  
20 print(speciality)
```

Verify Submit Python Visualize Execute

Result Pane: Orthopedics

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Assessment - Programming Fundamentals using Python 46m

Activate Windows Go to Settings to activate Windows.

```

10     return res
11 #Provide different values for msg1,msg2 and test your program
12 msg1="moto"
13 msg2="moto"
14 common_characters=find_common_characters(msg1,msg2)
15 print(common_characters)

```

Result Pane:

- 6 out of 6 test cases passed.
- 1 out of 1 structural test cases passed.
- 5 out of 5 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
N/A	Structural	1	find_common_characters(msg1,msg2)	N/A	N/A	N/A	✓

DAY 5

quiz and exercise

Predict the output of the following code snippet.

5 min

```

1 result=0
2 def find_sum(num1,num2):
3     if(num1==num2):
4         result=num1+num2
5     else:
6         result=2*(num1+num2)
7     find_sum(3,4)
8     print(result)
9     find_sum(5,5)
10    print(result)

```

0 14
 0 10
 7 Error:cannot modify global variable in
 20 a program

Submit

>Your answer is Right

Quiz 32



```
1 def func(word, char="A"):
2     if(char=="A"):
3         return len(word[1:])
4     elif(char=="B"):
5         return len(word[2:])
6     else:
7         return len(word)
8
9 print(func("Apple", "A"))
10 print(func("Apple", "B"))
11 print(func("Apple"))
12 print(func("Apple", "C"))
```

4 3 4 5

3 2 3 5

4 3

Error: missing 1 required positional argument
'char'

Error: "A" cannot be passed as an argument

4 3 5 5

Submit

✓ Your answer is Right

Exercise 26: Collaborative Exercise - Level 3



```
16 ..... sum += factorial(rem) ..
17 ..... temp = temp // 10 ..
18 ..... if(sum == x):
19 ..... ..... new_list.append(x) ..
20 ..... else:
21 ..... ..... pass ..
```

Add Note

Show Notes

Verify

Submit

Python

Visualize

Result Pane:

[1, 2, 145]

Exercise 27: Collaborative Exercise - Level 2

```
39 print("Invalid account number")
40 elif(transaction_type=="Balance Enquiry"):
41     for index in range(0,len(account_list)):
42         if(account_list[index]==account_number):
43             flag=True
44             value=index
```

Submit Python Visualize Execute

Result Pane:
Transaction completed successfully
Balance Amount : 4000

Exercise 28 – Level 2

```
10
11     count+=1
12     s[j]=count
13     if(s["Team1"]>s["Team2"]):
14         return "Team1"
15     elif(s["Team1"]<s["Team2"]):
```

Verify Submit Python Visualize Execute

Result Pane:
Team1

Exercise 29: Collaborative Exercise – Level 2

```
11 merged_list=merge_lists(list1=[1,2,3,4,1],list2=[2,3,4,5,4,6])
12 print(merged_list)
13 sorted_merged_list=sort_list(merged_list)
14 print(sorted_merged_list)
```

Verify Submit Python Visualize Execute

Result Pane:
[1, 2, 3, 4, 1, 2, 3, 4, 5, 4, 6]
[1, 1, 2, 2, 3, 3, 4, 4, 4, 5, 6]

Assignment 34-39

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← ← PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 34: Collaborative Assignment - Level 1

Problem Statement Starter Testcase Submission

Code pane:

```
1 #PF-Assgn-34
2 def find_pairs_of_numbers(num_list,n):
3     count=0
4     for index,num in enumerate(num_list):
5         for i in range(index+1,len(num_list)):
6             if num+num_list[i]==n:
7                 count=count+1
8     return count
9
10
11 num_list=[1, 2, 4, 5, 6]
12 n=7
13 print(find_pairs_of_numbers(num_list,n))
```

Verify Submit Python Visualize Execute

Result Pane:
2

Your code has been submitted.

Assignment 35: Collaborative Assignment - Level 2

Question Submission

Code pane:

```
1 #PF-Assgn-35
2
3 #Global variable
4 list_of_marks=(12,18,25,24,2,5,18,20,20,21)
5
6 def find_more_than_average():
7     avg = sum(list_of_marks)/len(list_of_marks)
8     count = 0
9     for marks in list_of_marks:
10        if marks>avg:
11            count=count+1
12    return (count*10)
13
14
15 def sort_marks():
16     return sorted(list(list_of_marks))
```

Verify Submit Python Visualize Execute

Result Pane:

18 out of 18 test cases passed.

3 out of 3 structural test cases passed.

15 out of 15 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
-----	------	-------	-------------	-------	----------	--------	--------

Assignment 37: Mandatory Assignment - Level 2

Question Submission

Code pane:

```
6 M
7 def calculate_total_chocolates():
8     return sum(chocolates_received)
9
10 def reward_child(child_id_rewarded,extra_chocolates):
11     if extra_chocolates<1:
12         print ("Extra-chocolates is less than 1")
13     elif child_id_rewarded not in child_id:
14         print("Child id is invalid")
15     else:
16         i = child_id.index(child_id_rewarded)
17         chocolates_received[i]=chocolates_received[i]+extra_chocolates
18     print(chocolates_received)
19
20 print(calculate_total_chocolates())
21 reward_child(20,2)
```

Verify Submit Python Visualize Execute

Result Pane:

14 out of 14 test cases passed.

2 out of 2 structural test cases passed.

12 out of 12 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
-----	------	-------	-------------	-------	----------	--------	--------

Assignment 38: Mandatory (puzzle) - Level 2

Question Submission

Code pane:

```

3 *def check_double(number):
4     ...double = number * 2
5     ...number1 = str(number)
6     ...double1 = str(double)
7     ...if len(number1) == len(double1):
8         ....for index, digit in enumerate(list(double1)):
9             .....if (digit in number1) and (digit != number1[index]):
10                 ...status = True
11             .....else:
12                 ...status = False
13             ...else:
14                 ...status=False
15             ...return status
16 ...
17 #Provide different values for number and test your program
18 print(check_double(125874))

```

Verify Submit Python Visualize Execute

Result Pane:

- 8 out of 8 test cases passed.
- 1 out of 1 structural test cases passed.
- 7 out of 7 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
-----	------	-------	-------------	-------	----------	--------	--------

LEARNING JOURNEY CERTIFICATION ALUMNI STORIES CONTEST ARENA GALLERY GET TO KNOW US

Assignment 39 - Level 3

Question Submission

Code pane:

```

22     ...print(item + " is available")
23     ...else:
24     ...    print(item + " stock is over")
25 ...
26 """This method accepts the index position of the item requested by the
   customer in the quantity_available list, and the requested quantity
   of the item."""
27 def check_quantity_available(index, quantity_requested):
28     ...if quantity_available[index] <= quantity_requested:
29         ...return 1
30     ...else:
31         ...return 0
32 ...
33 #Provide different values for items_ordered and test your program
34 #place_order("Veg Roll", 2, "Noodles", 2)
35 place_order("Fried Rice", 2, "Soup", 1)

```

Verifying... Enabling in 2 Python Visualize Execute

Result Pane:

```
Fried Rice stock is over
Soup is available
```

Your code has been submitted.

DAY 6

Assignment 40-44

◀ ⌂ PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 40: Collaborative Assignment - Level 1

Problem Statement Starter Testcase Submission

Code pane:

```
1 #PF-Assgn-40
2 def is_palindrome(word):
3     word.lower()
4     if word[::-1].lower() == word.lower():
5         return 1
6     else:
7         return 0
8
9 result=is_palindrome("Madam")
10 if(result):
11     print("The given word is a Palindrome")
12 else:
13     print("The given word is not a Palindrome")
```

Result Pane:

```
The given word is a Palindrome
```

Verify Submit Python Visualize Execute

◀ ⌂ Your code has been submitted.

◀ ⌂ PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 41: Collaborative Assignment – Level 2

Problem Statement Submission

Code pane:

```
16     sum_string = ''.join(temp)
17     final.append(sum_string)
18     if i==(len(num_str)-1):
19         if num_str[i+1]=='0':
20             temp=[]
21             continue
22         break
23     elif s>10:
24         break
25     return final
26
27
28 num_str="2825302"
29 print("The number is:",num_str)
30 result_list=find_ten_substring(num_str)
31 print(result_list)
```

Result Pane:

```
5 out of 5 test cases passed.
1 out of 1 structural test cases passed.
4 out of 4 logical test cases passed.
```

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
-----	------	-------	-------------	-------	----------	--------	--------

◀ ⌂ Your code has been submitted.

← < PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 42: Mandatory – Level 1

Problem Statement Submission

Code pane:

```

29     if is_prime(num,num/2):
30         return num
31     else:
32         l=find_factors(num)
33         return find_largest_prime_factor(l)
34 
35     def find_g(num):
36         sum=0
37         for i in range(num,num+9):
38             sum=sum+find_f(i)
39         return sum
40     #Accepts the number and returns the sum of the largest prime
        factors of the 9 consecutive numbers starting from the given
        number
41 
42 #Note:- Invoke function(s) from other function(s), wherever applicable.

```

Verify Submit Python Visualize Execute

Result Pane:

- 29 out of 29 test cases passed.
- 5 out of 5 structural test cases passed.
- 24 out of 24 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
-----	------	-------	-------------	-------	----------	--------	--------

Assignment 43: Mandatory – Level 1 😊

Problem Statement Submission

Code pane:

```

2 
3     def find_smallest_number(num):
4         for value in range(1,1000):
5             list=[]
6             for n in range(1,value+1):
7                 if value%n ==0:
8                     list.append(n)
9             if len(list) == num:
10                return value
11 
12 
13 num=16
14 print("The number of divisors : ",num)
15 result=find_smallest_number(num)
16 print("The smallest number having",num,"divisors:",result)

```

Verify Submit Python Visualize Execute

Result Pane:

- 5 out of 5 test cases passed.
- 1 out of 1 structural test cases passed.
- 4 out of 4 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
-----	------	-------	-------------	-------	----------	--------	--------

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 44: (puzzle) - Level 2

Problem Statement Starter Testcase Submission

Code pane:

```

1 #PF-Assgn-44a
2
3 def find_duplicates(list_of_numbers):
4     dup=[]
5     for num in list_of_numbers:
6         if (list_of_numbers.count(num)>1) and (num not in dup):
7             dup.append(num)
8     return dup
9
10 list_of_numbers=[1,2,2,3,3,3,4,4,4]
11 list_of_duplicates=find_duplicates(list_of_numbers)
12 print(list_of_duplicates)
13

```

Result Pane:

```
[2, 3, 4]
```

Verify Submit Python Visualize Execute

Your code has been submitted.

DAY 7

Assignment46-51

Assignment 46 – Level 2

Problem Statement Starter Testcase Submission

Code pane:

```

1 import sys
2 def small_Pallindrome(num):
3     numstr=str(num)
4     for i in range(num+1,sys.maxsize):
5         if str(i)==str(i)[::-1]:
6             return i
7     print(small_Pallindrome(12300));
8     print(small_Pallindrome(12331));

```

Result Pane:

```
12321
12421
```

Verify Submit Python Visualize Execute

Your code has been submitted.

◀ < PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 47: Collaborative Assignment (puzzle) – Level 2

Problem Statement Starter Testcase Submission

Code pane:

```
13.         for letter in word:-
14.             if letter not in vowels:-
15.                 t.append(letter):-
16.             else:-
17.                 v.append(letter):-
18.             t.extend(v):-
19.             final.append("".join(t)):-
20.             #if len(final)>1:-
21.             return "".join(final):-
22.             ...:-
23. sentence="the":-
24. encrypted_sentence=encrypt_sentence(sentence):-
25. print(encrypted_sentence):-
26. sentence="hello i am omkar":-
27. encrypted_sentence=encrypt_sentence(sentence):-
28. print(encrypted_sentence):-
```

Verify Enabling in 2 Python Visualize Execute

Result Pane:

```
eht
olleh i ma mkroa
```

◀ Your code has been submitted.

◀ < PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 48: Mandatory Assignment (puzzle) – Level 2

Problem Statement Starter Testcase Submission

Code pane:

```
14.         if key[i] != value[i]:-
15.             incorrect=incorrect+1:-
16.             if incorrect>2:-
17.                 wrong=wrong+1:-
18.                 break:-
19.             if incorrect<=2:-
20.                 almost=almost+1:-
21.             return [correct, almost, wrong]:-
22.             ...:-
23.             ...:-
24.             ...:-
25.             ...:-
26. word_dict={"CHECK": "CHEK", "RADICAL": "RADICAL", "MIND": "MUND", "-": "VENDOR": "VENDING", "ALWAYS": "ALLISWELL"}:-
27. print(find_correct(word_dict)):-
28. 
```

Verify Enabling in 2 Python Visualize Execute

Result Pane:

```
[0, 1, 4]
```

◀ Your code has been submitted.

≡ Assignment 49: Puzzle - Level 2

Question

Submission

Code pane:

```
1 #P-Tryout
2 import random
3
4 def biased_flip(prob_true):
5     return random.random()<prob_true
6
7
8 head,tail=0,0
9 for i in range(1000):
10     value=biased_flip(0.7)
11     if value:
12         head=head+1
13     else:
14         tail=tail+1
15 print("Heads: "+str(head))
16 print("Tails: "+str(tail))
```

Enabling in 1



Visualize

Execute

Result Pane:

```
Heads: 709
Tails: 291
```

Your code has been submitted.

≡ Assignment 50: Mandatory Assignment (puzzle) - Level 3

Question

Submission

Code pane:

```
3 def sms_encoding(data):
4     temp=[]
5     l=data.split(" ")
6     for word in l:
7         temp_word=[]
8         for letter in word:
9             if letter.lower() not in vowels:
10                 temp_word.append(letter)
11             if len(temp_word)==0:
12                 temp_word.append(word)
13                 temp.append("".join(temp_word))
14             return " ".join(temp)
15
16
17 data="GOOD DAYS AND BAD DAYS"
18 print(sms_encoding(data))
```

Verify

Submit



Visualize

Execute

Result Pane:

5 out of 5 test cases passed.

1 out of 1 structural test cases passed.

4 out of 4 logical test cases passed.

S/A	Type	Sl.no	Test Target	Input	Expected	Actual	Result
-----	------	-------	-------------	-------	----------	--------	--------



The below program is written to draw squares iteratively at different angles. Execute and observe the results. Modify the program to change it into a recursive program.

Estimated Time: 30 minutes

```

9 def
10 draw_square(length,angle):
11     for i in range (0,step):
12         for b in range (0,4):
13             turtle.forward(length+i)
14             turtle.right(angle+b)
15 ...
16
17 def draw_square(length,angle):
18     global step
19     if step<1:
20         return
21     else:
22         turtle.forward(length)
23         turtle.right(angle)
24         if angle==90==3:
25             step=step-1
26             angle=89
27             length=length+1
28         return draw_square(length,angle+1)
29
30 draw_square(100,90)
31

```

Run Code

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DAY9

assignment 57-61

Code pane:

```

18     m = int(str(num)[i:] + str(num)[:i] )
19     rotations.append(m)
20
21 def get_circular_prime_count(limit):
22     count=0
23     for i in range (limit):
24         flag=True
25         if(check_prime(i)):
26             t=rotations(i)
27             for j in t:
28                 if(check_prime(j)!=True):
29                     flag=False
30                     break
31             if(flag==True):
32                 count=count+1

```

Your code has been submitted.

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PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 58: Collaborative Assignment (puzzle) - Level 3

Code pane:

```
7 if (a%10==0):
8     dou=(int(numStr[i])*2)
9     if(len(str(dou))>=1):
10        for i in str(dou):
11            tu=int(i)
12            to=to+tu
13            tu=0
14        else:
15            to=to+int(dou)
16        else:
17            a=a+(int(numStr[i]))
18    if (a%10==0):
19        return True
20    else:
21        return False
22 and numbers - 1A5672A51234567890
```

Your code has been submitted.

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PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 59: Puzzle - Level 1

Code pane:

```
4 if(number==0):
5     return False
6     for x in range(1, number):
7         if number % x == 0:
8             sum += x
9     return sum == number#start writing your code herez
10
11 def check_perfectno_from_list(no_list):
12     list=[]
13     for i in no_list:
14         if (check_perfect_number(i)):
15             list.append(i)
16     return list
17 perfectno_list=check_perfectno_from_list([87, 76, 567, 99, 0])
18 print(perfectno_list)
```

Your code has been submitted.

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PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 60: Mandatory (puzzle) - Level 1

Code pane:

```
1 #PF-Assgn-60 — 12345abz@#%
2 def remove_duplicates(value):
3     #start writing your code here
4     str=""
5     for i in value:
6         if i not in str:
7             str=str+i
8     return str
9 print(remove_duplicates("1122344556666babzz@@@123#%"))
```

Your code has been submitted.

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PROGRAMMING FUNDAMENTALS USING PYTHON



Assignment 61: Mandatory - Level 2



```
46 ~
47 #Provide different values for name, phone_no and email_id and test your
     program
48 validate_all("Tina", "9994599998", "tina@yahoo.com")
```

Verify

Submit



Visualize

Execute

Result Pane:

25 out of 25 test cases passed.

4 out of 4 structural test cases passed.

21 out of 21 logical test cases passed.

S/A

Type

Sl.no

Test
Target

Input

Expected

Actual

Result



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DAY 8

exercise and quiz

 LEARNING JOURNEY CERTIFICATION ALUMNI STORIES CONTEST ARENA GALLERY GET TO KNOW US



Write a python program to perform the following operations on the given string using the various regular expression functions.
flight_details="Good Evening, Welcome to British Airways. Your flight number is ba8004. Flight departure time is 16:45"

1. Find whether the flight service name, British Airways is present in the given string and if so, display it.
2. Find whether the flight details ends with the departure time, 16:45 and if so, display it.
3. Find whether the flight details starts with "Good" and if so, display it.
4. Find a word which starts with 'F' and having 6 characters in it, if so display it.
5. Search for a word which starts with "ba" followed by exactly 4 digits. If found, replace the two alphabets with the corresponding uppercase alphabets.

For questions 1 to 4, if the searched pattern is not present, display "No Output"

Sample Input	Expected Output
flight_details = "Good Evening, Welcome to British Airways. Your flight number is ba8004. Flight departure time is 16:45"	British Airways 16:45 Good Flight Good Evening, Welcome to British Airways. Your flight number is BA8004. Flight departure time is 16:45

Estimated Time: 30 minutes

Code pane:

```
1 #PF-Tryout EX 36:  
2 import re:  
3 :  
4 flight_details="Good Evening, Welcome to British Airways. Your flight  
    number is ba8004. Flight departure time is 16:45":  
5 :  
6 #This function returns the values in the search result:
```



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Exercise 36 - Level 1



Estimated Time: 30 minutes

Code pane:

```
11     return "no output"
12
13 search_result = re.search(r"British Airways",flight_details)
14 #This will invoke the printout() and displays the search result values
15 print(printout(search_result))
16
17 search_result = re.search(r"16:45$",flight_details)
18 print(printout(search_result))
19
20 search_result = re.search(r"\^G",flight_details)
21 print(printout(search_result))
22
23 search_result = re.search(r"F.....",flight_details)
24 print(printout(search_result))
25
26
27 print(re.sub(r"ba(\d{4})",r"BA\1",flight_details))
```

Python

Result Pane:

```
British Airways
16:45
G
Flight
Good Evening, Welcome to British Airways. Your flight number is BA8004. Flight d
```



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Exercise 37 - Level 2



Here is the code to get you started:

```
1 #PF-Tryout
2
3 def func1():
4     result_sum=0
5     #Write the code to find the sum of numbers from 1 to 1000000
6     print("Sum from func1:",result_sum)
7
8 def func2():
9     result_sum=0
10    #Write the code to accept 5 numbers from user and find its sum
11    print("Sum from func2:",result_sum)
12
13 #Modify the code given below to execute func1() and func2() in two separate threads
14 func1()
15 func2()
```



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PROGRAMMING FUNDAMENTALS USING PYTHON



Quiz 40



What is the output of the following code snippet?

```
1 import re
2 word="Indian Airlines4"
3 if(re.search(r"^\I",word) and re.search(r"e$",word)):
4     print(re.sub(r"Indian",r"Singapore",word))
5 else:
6     print(re.sub(r"s(\d{1})",r"S\1",word))
```

[Python](#)[Copy](#) Indian Airlines4 Indian AirlineS Indian AirlineS4 Singapore Airlines4[Submit](#)

5 min

Your answer is Right

 In this option, control reaches line 6 and prints 'Indian AirlineS4'.
Line 2 assigns 'Indian Airlines4' to word.As the word is starting with 'I' and not ending with 'e', line 3 evaluates to false taking control to line 6.
Line 6 substitutes 's' before a digit in the word to 'S' resulting in output as 'Indian AirlineS4'.
Hence this is the answer.

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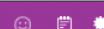
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Quiz 41



Select the correct lambda expressions.

 s = lambda x : y: (x+(x**y)/y)**x
print(s(2,8)) s = lambda x,y: (x+(x**y)/y)**x
print(s(8,2)) s = lambda x: (x+(x**2)/2)**x
print(s(8)) s = lambda : x (x+(x**3)/2)**x
print(s(8))[Submit](#)

5 min

Your answer is Right



Lambda expression

Remarks

s = lambda x,y: (x+(x**y)/y)**x print(s(8,2))	s(8,2) passes 8 to x and 2 to y as defined in the lambda signature
s = lambda x: (x+(x**2)/2)**x print(s(8))	s(8) passes 8 to x as defined in the lambda signature

Hence this is the answer.



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Quiz 42

Select the appropriate output for the following lambda expression:

```
1 g = lambda x: x%2 ==0
2 if (g(11)):
3     print("The number is even")
4 else:
5     print("The number is odd")
```

[Python](#) [Copy](#)

- The number is even
- The number is odd
- No output

[Submit](#)

Your answer is Right



As per this option, control reaches line 5.
g(11) in line 2 evaluates the lambda expression and returns the result of (11%2==0) which is false.
Thus control reaches line 5, printing 'The number is odd'.
Hence this is the answer.



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Quiz 43

Select the appropriate output for the following lambda expression:

```
1 k=lambda x,y : x%y
2 print(k(36,32)+ k(15,10))
```

[Python](#) [Copy](#)

- 9
- 8
- 5
- 2

[Submit](#)

Your answer is Right

Line 2, k(36,32) invokes lambda expression by passing x as 36 and y as 32 and returns 4. Similarly, k(15,10) invokes lambda expression by passing x as 15 and y as 10 and returns 5. Both the return values are summed up before printing.
Thus the output is (5+4) -> 9.
Hence this is the answer.



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Exercise 38: Collaborative Exercise - Level 1



Write a python lambda expression for the following:

1. Find the modulo of two numbers and add it to the difference of the same two numbers.
2. Find the square root of a number using math library built-in function.
3. Find the square root of a number without using built-in function.

Test your code by using the given sample inputs.

Verify your code by using the 2nd sample input(highlighted) given below:

Sample Input	Expected Output
num1 = 10	8
num2 = 4	6.0
num3 = 36	6.0
num1 = 36	
num2 = 7	
num3 = 18	

Estimated Time: 30 minutes

Code pane:

```
1 #PF-Exer-38
2 #This verification is based on string match.
3 import math
4 num1=36
5 num2=7
6 num3=18
7
8 calc = lambda num1,num2:num1%num2+num1-num2
9 print(calc(num1,num2))
```



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Exercise 38: Collaborative Exercise - Level 1



```
num1 = 36
num2 = 7
num3 = 18
```

Estimated Time: 30 minutes

Code pane:

```
1 #PF-Exer-38
2 #This verification is based on string match.
3 import math
4 num1=36
5 num2=7
6 num3=18
7
8 calc = lambda num1,num2:num1%num2+num1-num2
9 print(calc(num1,num2))
10
11 square_root = lambda num3:math.sqrt(num3)
12 print(square_root(num3))
13
14 square_root2= lambda num3: num3**0.5
15 print(square_root2(num3))
```

Verify Submit



Visualize Execute

Result Pane:

Correct Solution.



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Exercise 39 - Level 1



Write a python lambda expression for calculating simple interest.
If simple interest is greater than 1000, display as "Platinum Member", otherwise "Gold Member".

Use the below formula to calculate the simple interest.

$\text{simple_interest} = (\text{principal_amount} * \text{duration} * \text{years} * \text{rate_of_interest}) / 100$

Test your code by using the given sample inputs.

Verify your code by using the 2nd sample input(highlighted) given below:

Sample Input	Expected Output
<code>principal_amount = 2000 duration = 2 rate_of_interest = 10</code>	Gold Member
<code>principal_amount = 4000 duration = 12 rate_of_interest = 13</code>	

Estimated Time: 15 minutes

Code pane:

```
1 #PF-Exer-39:  
2 #This verification is based on string match.  
3  
4 principal_amount=4000  
5 duration=12  
6 rate_of_interest=13  
7  
8 simple_interest = lambda p,n,r:(p*n*r)/100
```



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Exercise 39 - Level 1



`principal_amount = 1000
duration = 12
rate_of_interest = 13`

Estimated Time: 15 minutes

Code pane:

```
1 #PF-Exer-39:  
2 #This verification is based on string match.  
3  
4 principal_amount=4000  
5 duration=12  
6 rate_of_interest=13  
7  
8 simple_interest = lambda p,n,r:(p*n*r)/100  
9  
10 if(simple_interest(principal_amount,duration,rate_of_interest)>1000):  
11     print("Platinum Member")  
12 else:  
13     print("Gold Member")
```

Verify Submit

Python

Visualize Execute

Result Pane:

Correct Solution.



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Exercise 40 - Level 1



Write a python lambda expression for calculating sum of two numbers and find out whether the sum is divisible by 10 or not.

Test your code by using the given sample inputs.

Verify your code by using the 2nd sample input(highlighted) given below:

Sample Input	Expected Output
num1 = 5 num2 = 10	Not Divisible by 10
num1 = 20 num2 = 30	

Estimated Time: 15 minutes

Code pane:

```
1 #PF-Exer-40
2 #This verification is based on string match.
3
4 num1=20
5 num2=30
6
7 div = lambda x,y:x+y
8
9 if(div(num1,num2)%10)==0:
10   print("Divisible by 10")
11 else:
12   print("Not Divisible by 10")
```



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Exercise 40 - Level 1



```
num1 = 20
num2 = 30
```

Estimated Time: 15 minutes

Code pane:

```
1 #PF-Exer-40
2 #This verification is based on string match.
3
4 num1=20
5 num2=30
6
7 div = lambda x,y:x+y
8
9 if(div(num1,num2)%10)==0:
10   print("Divisible by 10")
11 else:
12   print("Not Divisible by 10")
```

RESET

FULLSCREEN

A+

A-

LAST SUBMISSION



Python

Visualize

Execute

Result Pane:

Correct Solution.



Quiz 44

🕒 5 min

What is the output of the following code snippet?

```
1 def add(data):
2     return data+2
3 def prod(data):
4     return data*2
5 def main_fun(function1,function2, number_list):
6     result_sum=0
7     for num in number_list:
8         if(num%3==0):
9             result_sum=result_sum+function1(num)
10        else:
11            result_sum=result_sum+function2(num)
12    return result_sum
13 number_list=[1,3,5,6]
14 print(main_fun(add, prod, number_list))
```

 15 25 28**Submit****>Your answer is Right**

As per this option, 25 is the value returned from main_fun() in line 5.
Execution starts from line 13 where number_list is initialized with [1,3,5,6]
Line 14 invokes main_fun() by passing functions add, prod and number_list
Inside the function, for all the numbers in number_list which are divisible by 3, add() is invoked by passing that number and result is added to result_sum. For all the remaining numbers, prod() is invoked by passing each of the



Exercise 41: Collaborative Exercise - Level 2

🕒 5 min

Write a higher order function, sum_all() to calculate the sum of elements in a list.

sum_all() – It accepts a list and calculates the sum of the elements in the list based on the conditions being checked in the lambda expressions passed to it. Only those values satisfying the condition should be included in the sum.

Write the following lambda expressions.

1. greater: To check whether a given number is greater than 10.
2. divide: To check whether a given number is divisible by 10 and not greater than 100.
3. range_of_values: To check whether a given number is between 25 and 50 (Both inclusive).

Test your code by using the given sample inputs.

Verify your code by using the 2nd sample input(highlighted) given below:

Sample Input	Expected Output
list_of_nos = [25,26,27,28,29,30,147,187]	499 30 165
list_of_nos = [100,200,300,500,1040]	

Estimated Time: 20 minutes

Code pane:

```
9     return sum-
10    :
11    list_of_nos=[100,200,300,500,1040]#
12    :
13    greater_=lambda x: x>10#
14    :
15    divide_=lambda x: x%10==0 and x<100#
```





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Exercise 41: Collaborative Exercise - Level 2

Estimated Time: 20 minutes

Code pane:

```
9     return sum
10    list_of_nos = [100,200,300,500,1040]
11
12    greater = lambda x: x>10
13
14    divide = lambda s: s%10==0 and s<=100
15
16    range_of_values = lambda s: s>=25 and s<=50
17
18
19
20 #Use the below given print statements to display the output
21 # Also, do not modify them for verification to work
22 print(sum_all(greater,list_of_nos))
23 print(sum_all(divide,list_of_nos))
24 print(sum_all(range_of_values,list_of_nos))
```

RESET FULLSCREEN A+ A- LAST SUBMISSION

Verify Submit Python Visualize Execute

Result Pane:

Correct Solution.

Assignment 52-61

Assignment 52: Collaborative Assignment - Level 1

Question Submission

Code pane:

```
12 def even(data):
13     e=[]
14     for num in data:
15         if num%2!=0:
16             e.append(num)
17     return e
18
19 def odd(data):
20     o=[]
21     for num in data:
22         if num%2==0:
23             o.append(num)
24     return o
25 sample_data = range(1,11)
26
27 print(sum_of_numbers(sample_data,None))
```

Verify Enabling in 2 Python Visualize Execute

Result Pane:

55

Your code has been submitted.

PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 53 - Level 2

Question Submission

Code pane:

```
9 "Or cool one pain,"  
10 "Or help one fainting robin."  
11 "Unto his nest again,  
12 "I shall not live in vain."  
13 """  
14 "  
15 "#Note: Triple quotes can be used to enclose Strings which has lines of  
text."  
16 "  
17 pattern = re.compile(r"\n")  
18 matches=pattern.finditer(poem)  
19 count=0  
20 for match in matches:  
21 ... count=count+1  
22 print(count)  
23 print(re.sub(r'(\n+)(?=[A-Z])', r' ', poem))
```

Verify Submit Python Visualize Execute

Result Pane:

```
4  
If I can stop one heart from breaking, I shall not live in vain; If I can ease
```

Your code has been submitted.

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Assignment 53 - Level 2

Question Submission

Code pane:

```
1 #PF-Assgn-53  
2 #This verification is based on string match.  
3 import re  
4 "  
5 poem="""  
6 It takes strength for being certain,  
7 It takes courage to have doubt,  
8 It takes strength for challenging alone,  
9 It takes courage to lean on another,  
10 It takes strength for loving other souls,  
11 It takes courage to be loved,  
12 It takes strength for hiding our own pain,  
13 It takes courage to help if it is paining for someone.  
14 """  
15 "  
16 "#Note: Triple quotes can be used to enclose Strings which has lines of  
text."
```

Verify Submit Python Visualize Execute

Result Pane:

```
3  
It takes strength for being certain, It takes courage to have doubt. It takes  
It takes strength for being certain,
```



Assignment 54: Puzzle - Level 1



Problem Statement

Starter Testcase

Submission

Code pane:

```
1 #PF-Assgn-54
2 def check_anagram(data1,data2):
3     if len(data1)!=len(data2):
4         return False
5     for i in range(0,len(data1)):
6         if data1[i]==data2[i]:
7             continue
8         if data1.count(data1[i])!=data2.count(data1[i]):
9             return False
10    return True
11
12 print(check_anagram("eat","tea"))
```

Verify

Submit

Python

Visualize

Execute

Result Pane:

True



Assignment 55: Mandatory - Level 2



Question

Submission

Code pane:

```
1 #PF-Assgn-55
2
3 #Sample ticket_list-- ticket_format--"flight_no:source:destination
4 #Note:- flight_no has the following format--"airline_name followed by
5 import re
6 #Global variables
7 ticket_list=[ "AI567:MUM:LON:014", "AI077:MUM:LON:056", "BA896:MUM:LON
8 :067", "SI267:MUM:SIN:145", "AI077:MUM:CAN:069", "SI267:BLR:MUM:148"
9 , "AI567:CHE:SIN:015", "AI077:MUM:SIN:050", "AI077:MUM:LON:051", "SI267
10 :MUM:SIN:146" ]
11
12 def find_passengers_flight(airline_name="AI"):
13     #This function finds and returns the number of passengers
14     #travelling in the specified airline.
15     count=0
```

Verify

Submit

Python

Visualize

Execute

Result Pane:

```
6
4
['AI077:4', 'SI267:3', 'AI567:2', 'BA896:1']
```



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Assignment 56: (puzzle) - Level 3



Question

Submission

Code pane:

```
1 # PF-Assgn-56
2 # PF-Assgn-56
3 import re
4
5
6 def max_frequency_word_counter(data):
7     data_dict = {}
8     word = ""
9     frequency = 0
10    data = re.sub(r"\s+", " ", data).lower()
11    while data:
12        temp = data.split()
13        for word in temp:
14            count = temp.count(word) # lis = re.findall(r"\b(?=\w)" + re.escape(word) + r"\b(?!\\w)", data)
15            if len(data_dict) == 0:
16                data_dict.update({word: count})
17            else:
18                if word in data_dict:
19                    data_dict[word] += count
20                else:
21                    data_dict[word] = count
22
23    return data_dict
```

Verify

Submit



Python

Visualize

Execute

Result Pane:

```
{'work': 1, 'like': 3, 'you': 3}
like 3
your 2
your 2
```



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PROGRAMMING FUNDAMENTALS USING PYTHON



Assignment 57: Puzzle - Level 2



Question

Submission

Code pane:

```
2 def check_prime(number):
3     pass #remove pass and write your logic here. if the number is prime.
4         return true, else return false
5
6 def rotations(num):
7     pass #remove pass and write your logic here. It should return the
8         list of different combinations of digits of the given number.
9         #Rotation should be done in clockwise direction. For example, if
10            the given number is 197, the list returned should be [197, 971,
11            719].
12
13 def get_circular_prime_count(limit):
14     pass #remove pass and write your logic here. It should return the
15         count of circular prime numbers below the given limit.
16
17 #Provide different values for limit and test your program.
18 print(get_circular_prime_count(1000))
```

Verify

Submit



Python

Visualize

Execute

Result Pane:

```
None
```

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PROGRAMMING FUNDAMENTALS USING PYTHON

Assignment 58: Collaborative Assignment (puzzle) - Level 3

Problem Statement Starter Testcase Submission

Code pane:

```
1 | 
2 | 
3 import sys
4 |
5 |
6 def usage():
7     msg = """
8     usage:
9     python3 credit_card_validator credit_card_number
10    example:
11    python3 credit_card_validator 34678253793
12    """
13    print(msg)
14 |
15 """
16 print(msg)
17 |
```

Verify Submit Python Visualize Execute

Result Pane:

```
usage:
python3 credit_card_validator credit_card_number
example:
python3 credit card validator 34678253793
```

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Assignment 59: Puzzle - Level 1

Question Starter Code Submission

Code pane:

```
1 def perfect_number(n):
2     sum = 0
3     for x in range(1, n):
4         if n % x == 0:
5             sum += x
6     return sum == n
7 print(perfect_number(6))
```

Verify Submit Python Visualize Execute

Result Pane:

```
True
```



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Assignment 60: Mandatory (puzzle) - Level 1



Problem Statement

Starter Testcase

Submission

Code pane:

```
1 from collections import OrderedDict
2 def remove_duplicate(str1):
3     ...return "".join(OrderedDict.fromkeys(str1))
4 ...
5 print(remove_duplicate("python exercises practice solution"))
6 print(remove_duplicate("w3resource"))
7 ...
```

Verify

Submit



Python

Visualize

Execute

Result Pane:

```
python excisalu
w3resouc
```



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Assignment 61: Mandatory - Level 2



Question

Submission

Code pane:

```
1 # Python program to check validation of password
2 # Module of regular expression is used with search()
3 import re
4 password = "R@m@_f0rtu9es$"
5 flag = 0
6 while True:
7     if (len(password)<8):
8         flag = -1
9         break
10    elif not re.search("[a-z]", password):
11        flag = -1
12        break
13    elif not re.search("[A-Z]", password):
14        flag = -1
15        break
16    elif not re.search("[0-9]", password):
17        flag = -1
...  
...
```

Verify

Submit



Python

Visualize

Execute

Result Pane:

```
Valid Password
```