Part 1 - Main Version

# I declare that my work contains no examples of misconduct, such as plagiarism, or

collusion.

# Any code taken from other sources is referenced within my code solution.

# Student ID: 20210332

# Date: 12/8/2021

1.Outcomes

progress=0

trailer=0

retriever=0

Exclude=0

while True: #this is infinite loop or endless loop

passs=int(input('Enter your pass marks : '))

defer=int(input('Enter your defer marks : '))

fail=int(input('Enter your fail marks : '))

if((passs==120) and (defer==0) and (fail==0)):

progress+=1

print('Progress')

elif((passs==100) and (defer==20 or defer==0) and (fail==20 or fail==0)):

trailer+=1

print('Progress (Module trailer)')

elif((passs==80 or passs==60 or passs==40 or passs==20 or passs==0) and (defer==120 or defer==100 or defer==80 or defer==60 or defer==40 or defer==20 or defer==0) and (fail==60 or fail==40 or fail==20 or fail==0)):

retriever+=1

print('Do not progess - module retriever')

elif((passs==40 or passs==20 or passs==0) and (defer==40 or defer==20 or defer==0) and (fail==120 or fail==100 or fail==80)):

Exclude+=1

print('Exclude')

continue

break

2. Validation

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# Date: 12/8/2021

progress=0

trailer=0

retriever=0

Exclude=0

while True: #this is infinite loop or endless loop

try:

passs=int(input('Enter your pass marks : '))

defer=int(input('Enter your defer marks : '))

fail=int(input('Enter your fail marks : '))

if((passs %20!=0 or defer%20!=0 or fail%20!=0) or ((0>passs or passs>120) or (0>defer or defer>120) or (0>fail or fail>120))):

print('Out of range')

continue

elif(passs+defer+fail !=120):

print('Total incorrect')

continue

elif((passs==120) and (defer==0) and (fail==0)):

progress+=1

print('Progress')

elif((passs==100) and (defer==20 or defer==0) and (fail==20 or fail==0)):

trailer+=1

print('Progress (Module trailer)')

elif((passs==80 or passs==60 or passs==40 or passs==20 or passs==0) and (defer==120 or defer==100 or defer==80 or defer==60 or defer==40 or defer==20 or defer==0) and (fail==60 or fail==40 or fail==20 or fail==0)):

retriever+=1

print('Do not progess - module retriever')

elif((passs==40 or passs==20 or passs==0) and (defer==40 or defer==20 or defer==0) and (fail==120 or fail==100 or fail==80)):

Exclude+=1

print('Exclude')

except ValueError:

print('Integer Required')

continue

3. Multiple Outcomes & Histogram

# I declare that my work contains no examples of misconduct, such as plagiarism, or

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# Student ID: 20210332

# Date: 12/8/2021

progress=0

trailer=0

retriever=0

Exclude=0

while True: #this is infinite loop or endless loop

try:

passs=int(input('Enter your pass marks : '))

defer=int(input('Enter your defer marks : '))

fail=int(input('Enter your fail marks : '))

if((passs %20!=0 or defer%20!=0 or fail%20!=0) or ((0>passs or passs>120) or (0>defer or defer>120) or (0>fail or fail>120))):

print('Out of range')

continue

elif(passs+defer+fail !=120):

print('Total incorrect')

continue

elif((passs==120) and (defer==0) and (fail==0)):

progress+=1

print('Progress')

elif((passs==100) and (defer==20 or defer==0) and (fail==20 or fail==0)):

trailer+=1

print('Progress (Module trailer)')

elif((passs==80 or passs==60 or passs==40 or passs==20 or passs==0) and (defer==120 or defer==100 or defer==80 or defer==60 or defer==40 or defer==20 or defer==0) and (fail==60 or fail==40 or fail==20 or fail==0)):

retriever+=1

print('Do not progess - module retriever')

elif((passs==40 or passs==20 or passs==0) and (defer==40 or defer==20 or defer==0) and (fail==120 or fail==100 or fail==80)):

Exclude+=1

print('Exclude')

except ValueError:

print('Integer Required')

continue

choise=input('Would you like to enter another set of data? \n''Enter \'y\' for yes or \'q\' to quit and view results: q -')

if(choise=='y'):

continue

elif(choise=='q'):

print('\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\nHorizontal Histogram ')

print('progress ',progress , ':' ,'\*' \*progress)

print('Trailer ',trailer , ':' ,'\*' \*trailer)

print('Retriever ',retriever, ':' ,'\*' \*retriever)

print('Exclude ',Exclude , ':' ,'\*' \*Exclude)

print(progress+trailer+retriever+Exclude,'out comse in total.')

print('\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ ')

break

else:

print('Invalid choise')

continue

Part 2 - Vertical Histogram (extension)

# I declare that my work contains no examples of misconduct, such as plagiarism, or

collusion.

# Any code taken from other sources is referenced within my code solution.

# Student ID: 20210332

# Date: 12/8/2021

progress=0

trailer=0

retriever=0

Exclude=0

def printStars(count, x):

if(count>x):

return "\*"

else:

return " "

while True: #this is infinite loop or endless loop

try:

passs=int(input('Enter your pass marks : '))

defer=int(input('Enter your defer marks : '))

fail=int(input('Enter your fail marks : '))

if((passs %20!=0 or defer%20!=0 or fail%20!=0) or ((0>passs or passs>120) or (0>defer or defer>120) or (0>fail or fail>120))):

print('Out of range')

continue

elif(passs+defer+fail !=120):

print('Total incorrect')

continue

elif((passs==120) and (defer==0) and (fail==0)):

progress+=1

print('Progress')

elif((passs==100) and (defer==20 or defer==0) and (fail==20 or fail==0)):

trailer+=1

print('Progress (Module trailer)')

elif((passs==80 or passs==60 or passs==40 or passs==20 or passs==0) and (defer==120 or defer==100 or defer==80 or defer==60 or defer==40 or defer==20 or defer==0) and (fail==60 or fail==40 or fail==20 or fail==0)):

retriever+=1

print('Do not progess - module retriever')

elif((passs==40 or passs==20 or passs==0) and (defer==40 or defer==20 or defer==0) and (fail==120 or fail==100 or fail==80)):

Exclude+=1

print('Exclude')

except ValueError:

print('Integer Required')

continue

choise=input('Would you like to enter another set of data? \n''Enter \'y\' for yes or \'q\' to quit and view results: q -')

if(choise.lower()=='y'):

continue

elif(choise.lower()=='q'):

max\_no = max(progress,trailer,retriever,Exclude)

print('\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\n Vertical Histogram ')

print(f"{'Progress' : <10}{'Trailer' : ^10}{'Retriever' : ^10}{'Exclude' : >5}")

for x in range(max\_no):

print(f"{printStars(progress,x): ^10}{printStars(trailer,x) : ^10}{printStars(retriever,x) : ^10}{printStars(Exclude,x) : ^10}")

print('\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ ')

break

else:

print('Invalid choise')

continue

Part 3 - List/Tuple/Directory (extension)

# I declare that my work contains no examples of misconduct, such as plagiarism, or

collusion.

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# Student ID: 20210332

# Date: 12/8/2021

progress=0

trailer=0

retriever=0

Exclude=0

data\_set=[]

while True: #this is infinite loop or endless loop

try:

passs=int(input('Enter your pass marks : '))

defer=int(input('Enter your defer marks : '))

fail=int(input('Enter your fail marks : '))

if((passs %20!=0 or defer%20!=0 or fail%20!=0) or ((0>passs or passs>120) or (0>defer or defer>120) or (0>fail or fail>120))):

print('Out of range')

continue

elif(passs+defer+fail !=120):

print('Total incorrect')

continue

elif((passs==120) and (defer==0) and (fail==0)):

progress+=1

data\_set.append(["Progress-",passs,defer,fail])

print('Progress')

elif((passs==100) and (defer==20 or defer==0) and (fail==20 or fail==0)):

trailer+=1

data\_set.append(["Progress(Module trailer )-",passs,defer,fail])

print('Progress (Module trailer)')

elif((passs==80 or passs==60 or passs==40 or passs==20 or passs==0) and (defer==120 or defer==100 or defer==80 or defer==60 or defer==40 or defer==20 or defer==0) and (fail==60 or fail==40 or fail==20 or fail==0)):

retriever+=1

data\_set.append(["Module retriever -",passs,defer,fail])

print('Do not progess - module retriever')

elif((passs==40 or passs==20 or passs==0) and (defer==40 or defer==20 or defer==0) and (fail==120 or fail==100 or fail==80)):

Exclude+=1

data\_set.append(["Exclude -",passs,defer,fail])

print('Exclude')

except ValueError:

print('Integer Required')

continue

choise=input('Would you like to enter another set of data? \n''Enter \'y\' for yes or \'q\' to quit and view results: q -')

if(choise=='y'):

continue

elif(choise=='q'):

for count in data\_set:

print(f"{count[0]} {count[1]},{count[2]},{count[3]}")

break

else:

print('Invalid choise')

continue

Part 4 - Text File

# I declare that my work contains no examples of misconduct, such as plagiarism, or

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# Date: 12/8/2021

progress=0

trailer=0

retriever=0

Exclude=0

data\_set=[]

while True: #this is infinite loop or endless loop

try:

passs=int(input('Enter your pass marks : '))

defer=int(input('Enter your defer marks : '))

fail=int(input('Enter your fail marks : '))

if((passs %20!=0 or defer%20!=0 or fail%20!=0) or ((0>passs or passs>120) or (0>defer or defer>120) or (0>fail or fail>120))):

print('Out of range')

continue

elif(passs+defer+fail !=120):

print('Total incorrect')

continue

elif((passs==120) and (defer==0) and (fail==0)):

progress+=1

data\_set.append(["Progress-",passs,defer,fail])

print('Progress')

elif((passs==100) and (defer==20 or defer==0) and (fail==20 or fail==0)):

trailer+=1

data\_set.append(["Progress(Module trailer )-",passs,defer,fail])

print('Progress (Module trailer)')

elif((passs==80 or passs==60 or passs==40 or passs==20 or passs==0) and (defer==120 or defer==100 or defer==80 or defer==60 or defer==40 or defer==20 or defer==0) and (fail==60 or fail==40 or fail==20 or fail==0)):

retriever+=1

data\_set.append(["Module retriever -",passs,defer,fail])

print('Do not progess - module retriever')

elif((passs==40 or passs==20 or passs==0) and (defer==40 or defer==20 or defer==0) and (fail==120 or fail==100 or fail==80)):

Exclude+=1

data\_set.append(["Exclude -",passs,defer,fail])

print('Exclude')

except ValueError:

print('Integer Required')

continue

else:

file=open('mytext.txt', 'w')

for line in data\_set:

ready\_to\_write=f"{line[0]} - {line[1]},{line[2]},{line[3]}\n"

file.write (ready\_to\_write)

file.flush()

file.close()

choise=input('Would you like to enter another set of data? \n''Enter \'y\' for yes or \'q\' to quit and view results: q -')

if(choise=='y'):

continue

elif(choise=='q'):

file\_1=open('mytext.txt', 'r')

print(file\_1.read())

file\_1.close()

break

else:

print('Invalid choise')

continue