



Code

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# 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 - IIT: 2018434
# Student ID - UOW: w1761916
# Date: 28.11.2019
staff_user=input("Do you want to check a progression outcome of a student?\n If yes, enter y\n If no,
enter q\nEnter:")
progress=0
trailing=0
retrieve=0
excluded=0
while staff_user=="y":
  while True: #this loop will run because the condition is already true.
    while True: #this loop will run because the condition is already true.
      while True: #this loop will run because the condition is already true.
        pass_credits=input("Number of credits at Pass:")
        try:
          pass_credits= int(pass_credits)
          break #from this, process will come out from the specific loop
        except ValueError:
          print("Integers required")
           continue #from this, continue the loop
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if pass_credits%20!=0:
    print("Range Error")
    continue #from this, continue the loop
  break #from this, process will come out from the specific loop
while True:
  while True:
    defer_credits=input("Number of credits at Defer:")
    try:
      defer_credits=int(defer_credits)
      break
    except ValueError:
      print("Integers required")
      continue
  if defer_credits%20!=0:
    print("Range Error")
    continue
  break
while True:
  while True:
    fail_credits=input("Number of credits at Fail:")
    try:
      fail_credits=int(fail_credits)
      break
    except ValueError:
      print("Integers required")
      continue
  if fail_credits%20!=0:
```

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print("Range Error")
        continue
      break
    total_credits=[pass_credits,defer_credits,fail_credits]
    if sum(total_credits)!=120:
      print("Total Incorrect")
      continue
    break
def progress():
    print("Progression Outcome = Progress ")
    global progresses
    progresses+=1
  def trailer():
    print("Progression Outcome = Progress - module trailer")
    global trailing
    trailing+=1
  def retriever():
    print("Progression Outcome = Do not Progress – module retriever ")
    global retrieve
    retrieve+=1
  def excluded():
    print("Progression Outcome = Exclude ")
    global exclude
    exclude+=1
```

```
progress()
  elif pass_credits==100 and defer_credits==20 or defer_credits==0 and fail_credits==0 or
fail_credits==20:
    trailer()
  elif pass_credits==80 and defer_credits==40 and fail_credits==0:
    retriever()
  elif pass_credits==80 and defer_credits==20 and fail_credits==20:
    retriever()
  elif pass_credits==80 and defer_credits==0 and fail_credits==40:
    retriever()
  elif pass_credits==60 and defer_credits==60 and fail_credits==0:
    retriever()
  elif pass_credits==60 and defer_credits==40 and fail_credits==20:
    retriever()
  elif pass_credits==60 and defer_credits==20 and fail_credits==40:
    retriever()
  elif pass_credits==60 and defer_credits==0 and fail_credits==60:
    retriever()
  elif pass_credits==40 and defer_credits==80 and fail_credits==0:
    retriever()
  elif pass_credits==40 and defer_credits==60 and fail_credits==20:
    retriever()
  elif pass_credits==40 and defer_credits==40 and fail_credits==40:
```

if pass_credits==120 and defer_credits==0 and fail_credits==0:

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retriever()
elif pass_credits==40 and defer_credits==20 and fail_credits==60:
  retriever()
elif pass_credits==40 and defer_credits==0 and fail_credits==80:
  excluded()
elif pass_credits==20 and defer_credits==100 and fail_credits==0:
  retriever()
elif pass_credits==20 and defer_credits==80 and fail_credits==20:
  retriever()
elif pass_credits==20 and defer_credits==60 and fail_credits==40:
  retriever()
elif pass_credits==20 and defer_credits==40 and fail_credits==60:
  retriever()
elif pass_credits==20 and defer_credits==20 and fail_credits==80:
  excluded()
elif pass_credits==20 and defer_credits==0 and fail_credits==100:
  excluded()
elif pass_credits==0 and defer_credits==120 and fail_credits==0:
  retriever()
elif pass_credits==0 and defer_credits==100 and fail_credits==20:
  retriever()
elif pass_credits==0 and defer_credits==80 and fail_credits==40:
  retriever()
elif pass_credits==0 and defer_credits==60 and fail_credits==60:
  retriever()
elif pass_credits==0 and defer_credits==40 and fail_credits==80:
  excluded()
elif pass_credits==0 and defer_credits==100 and fail_credits==20:
  excluded()
```

```
elif pass_credits==0 and defer_credits==0 and fail_credits==120:
    excluded()
  print()
  staff_user=input("Do you want to check a progression outcome of a student?\n If yes, enter y\n If no,
enter q\n Enter:")
else:
  total=[progresses,trailing,retrieve,exclude]
#Horizontal Histogram
  print("Progress ",total[0],end=" ")
  for j in range(total[0]):
    print("*",end="")
  print()
  print("Trailing ",total[1],end=" ")
  for j in range(total[1]):
    print("*",end="")
  print()
  print("Retreiver",total[2],end=" ")
  for j in range(total[2]):
    print("*",end="")
  print()
  print("Excluded ",total[3],end=" ")
  for j in range(total[3]):
    print("*",end="")
```

```
print()
  print()
  print(sum(total),"outcomes in total.")
  print()
#vertically histogram
  print("Progress",end=" ");print("Trailing",end=" ");print("Retreiver",end=" ");print("Excluded")
for j in range(total[0]):
    print(" *")
    print(end="")
                     ")
  print(end="
  for j in range(total[1]):
    print("*")
    print(end="
                       ")
                  ")
  print(end="
  for j in range(total[2]):
    print("*")
                            ")
    print(end="
                   ")
  print(end="
  for j in range(total[3]):
    print("*")
                                  ")
    print(end="
```

Student Name: S. R. B. N. Sanduni Bhagya Student ID: 2018434 / w1761916				
Test No.	Test Input	Expected Result	Actual Result (State if not attempted)	Pass/Fail
1	Enter:y Pass = 120	'Progress' is displayed	'Progress' is displayed	Pass
2	Enter:y Pass = 100 Defer = 20	'Progress – module trailer' is displayed	'Progress – module trailer' is displayed	Pass
3	Enter:y Pass = 100 Fail = 20	'Progress – module trailer' is displayed	'Progress – module trailer' is displayed	Pass
4	Enter:y Pass = 80 Defer = 40 Fail = 0	'Do not Progress – module retriever' is displayed	'Do not Progress – module retriever' is displayed	Pass
5	Enter:y Pass = 40 Defer = 80 Fail = 0	'Do not Progress – module retriever' is displayed	'Do not Progress – module retriever' is displayed	Pass
6	Enter:y Pass = 40 Defer = 40 Fail = 40	'Do not Progress – module retriever' is displayed	'Do not Progress – module retriever' is displayed	Pass
7	Enter:y Pass = 20 Defer = 60 Fail = 40	'Do not Progress – module retriever' is displayed	'Do not Progress – module retriever' is displayed	Pass
8	Enter:y Pass = 20 Defer = 20 Fail = 80	'Exclude' is displayed	'Exclude' is displayed	Pass
9	Enter:y Pass = 20 Fail = 100	'Exclude' is displayed	'Exclude' is displayed	Pass
10	Enter:y Fail = 120	'Exclude' is displayed	'Exclude' is displayed	Pass
11	Enter:q	Histogram Displayed	Histogram Displayed	Pass

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Python 3.7.3 Shell
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File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Inte ^
Type "help", "copyright", "credits" or "license()" for more information.
>>>
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part2 w1761916.py ======
Do you want to check a progression outcome of a student?
If yes, enter y
If no, enter q
Enter:y
Number of credits at Pass:120
Number of credits at Defer:0
Number of credits at Fail:0
Progression Outcome = Progress
Do you want to check a progression outcome of a student?
If yes, enter y
If no, enter q
Enter:v
Number of credits at Pass:100
Number of credits at Defer:20
Number of credits at Fail:0
Progression Outcome = Progress - module trailer
Do you want to check a progression outcome of a student?
If yes, enter y
If no, enter q
Enter:y
Number of credits at Pass:100
Number of credits at Defer:0
Number of credits at Fail:20
Progression Outcome = Progress - module trailer
Do you want to check a progression outcome of a student?
If yes, enter y
If no, enter q
Enter:y
Number of credits at Pass:80
Number of credits at Defer:40
Number of credits at Fail:0
Progression Outcome = Do not Progress - module retriever
                                                                         Ln: 118 Col: 4
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