



<u>Code</u>

```
# 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
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
    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:
    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")
def trailer():
  print("Progression Outcome = Progress - module trailer ")
def retriever():
  print("Progression Outcome = Do not Progress - module retriever ")
def excluded():
  print("Progression Outcome = Exclude ")
if pass_credits==120 and defer_credits==0 and fail_credits==0:
  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()
```

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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:
  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()
```

Student Name	: S. R. B. N. Sanduni E	Student ID: 2018434	/ w1761916	
Test No.	Test Input	Expected Result	Actual Result (State if not attempted)	Pass/Fail
1	Pass = 120	'Progress' is displayed	'Progress' is displayed	Pass
2	Pass = 100 Defer = 20	'Progress – module trailer' is displayed	'Progress – module trailer' is displayed	Pass
3	Pass = 100 Fail = 20	'Progress – module trailer' is displayed	'Progress – module trailer' is displayed	Pass
4	Pass = 80 Defer = 20 Fail = 20	'Do not Progress – module retriever' is displayed	'Do not Progress – module retriever' is displayed	Pass
5	Pass = 60 Defer = 40 Fail = 20	'Do not Progress – module retriever' is displayed	'Do not Progress – module retriever' is displayed	Pass

6	Pass = 40 Defer = 40 Fail = 40	'Do not Progress – module retriever' is displayed	'Do not Progress – module retriever' is displayed	Pass			
7	Pass = 20 Defer = 40 Fail = 60	'Do not Progress – module retriever' is displayed	'Do not Progress – module retriever' is displayed	Pass			
8	Pass = 20 Defer = 20 Fail = 80	'Exclude' is displayed	'Exclude' is displayed	Pass			
9	Pass = 20 Fail = 100	'Exclude' is displayed	'Exclude' is displayed	Pass			
10	Fail = 120	'Exclude' is displayed	'Exclude' is displayed	Pass			
Checking input data type, credit range and credit total:							
11	Pass = a	'Integers required' displayed	'Integers required' displayed	Pass			
12	Defer = b	'Integers required' displayed	'Integers required' displayed	Pass			
13	Fail = c	'Integers required' displayed	'Integers required' displayed	Pass			
14	Pass = 2	'Range error' is displayed	'Range error' is displayed	Pass			
15	Defer = 5	'Range error' is displayed	'Range error' is displayed	Pass			
16	Fail = 10	'Range error' is displayed	'Range error' is displayed	Pass			
17	Pass = 100 Defer = 40	'Total incorrect' is displayed	'Total incorrect' is displayed	Pass			
18	Pass = 60 Fail = 40	'Total incorrect' is displayed	'Total incorrect' is displayed	Pass			

```
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 ^
1)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:120
Number of credits at Defer:0
Number of credits at Fail:0
Progression Outcome = Progress
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py =======
Number of credits at Pass:100
Number of credits at Defer:20
Number of credits at Fail:0
Progression Outcome = Progress - module trailer
>>>
===== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:100
Number of credits at Defer:0
Number of credits at Fail:20
Progression Outcome = Progress - module trailer
>>>
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py =======
Number of credits at Pass:80
Number of credits at Defer:20
Number of credits at Fail:20
Progression Outcome = Do not Progress - module retriever
>>>
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:60
Number of credits at Defer:40
Number of credits at Fail:20
Progression Outcome = Do not Progress - module retriever
>>>
===== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:40
Number of credits at Defer:40
Number of credits at Fail:40
Progression Outcome = Do not Progress - module retriever
>>>
                                                                          Ln: 63 Col: 4
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Python 3.7.3 Shell
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File Edit Shell Debug Options Window Help
Number of credits at Defer:20
Number of credits at Fail:20
Progression Outcome = Do not Progress - module retriever
>>>
===== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:60
Number of credits at Defer:40
Number of credits at Fail:20
Progression Outcome = Do not Progress - module retriever
>>>
===== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:40
Number of credits at Defer:40
Number of credits at Fail:40
Progression Outcome = Do not Progress - module retriever
>>>
===== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:20
Number of credits at Defer:40
Number of credits at Fail:60
Progression Outcome = Do not Progress - module retriever
>>>
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:20
Number of credits at Defer:20
Number of credits at Fail:80
Progression Outcome = Exclude
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:20
Number of credits at Defer:0
Number of credits at Fail:100
Progression Outcome = Exclude
>>>
===== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:0
Number of credits at Defer:0
Number of credits at Fail:120
Progression Outcome = Exclude
>>>
                                                                          Ln: 63 Col: 4
```

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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 ^
1)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py =======
Number of credits at Pass:a
Integers required
Number of credits at Pass:
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py =======
Number of credits at Pass:0
Number of credits at Defer:b
Integers required
Number of credits at Defer:
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py =======
Number of credits at Pass:0
Number of credits at Defer:0
Number of credits at Fail:c
Integers required
Number of credits at Fail:
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py =======
Number of credits at Pass:2
Range Error
Number of credits at Pass:
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======
Number of credits at Pass:0
Number of credits at Defer:5
Range Error
Number of credits at Defer:
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py =======
Number of credits at Pass:0
Number of credits at Defer:0
Number of credits at Fail:10
Range Error
Number of credits at Fail:
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py =======
Number of credits at Pass:100
Number of credits at Defer:40
Number of credits at Fail:0
Total Incorrect
Number of credits at Pass:
                                                                         Ln: 45 Col: 26
```

Number of credits at Defer:

======= RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1_w1761916.py =======

Number of credits at Pass:0

Number of credits at Defer:0

Number of credits at Fail:10

Range Error

Number of credits at Fail:
====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1_w1761916.py =======

Number of credits at Pass:100

Number of credits at Defer:40

Number of credits at Fail:0

Total Incorrect

Number of credits at Pass:

====== RESTART: C:\Users\Sanduni\Desktop\Python\cw\part1 w1761916.py ======

Number of credits at Fail:40 Total Incorrect
Number of credits at Pass:

Number of credits at Pass:60 Number of credits at Defer:0

Range Error

Ln: 45 Col: 26