```
In [ ]:
```

1

In [6]:

```
def height_differentiator(*heights):
 1
 2
 3
 4
            This code recieves 100 input of varying men heights and tell how many
 5
            men and short and tall. It also tells which category has more men.
 6
 7
       short_men =[]
 8
 9
       tall men = []
       for i in heights:
10
            #heights = float(input('Enter the heights of the men in meters: '))
11
12
            if type(i) != float:
13
                print(' invalid input')
            else:
14
15
                for i in heights:
                    if i <= 1.5:
16
                        short_men.append(i)
17
                    else:
18
                        tall_men.append(i)
19
                print(f'There are {len(short men)} short men and {len(tall men)} tall men
20
21
                if short_men > tall_men:
                     return f'There are {len(short_men)-len(tall_men)} more short men than
22
23
                else:
                     return f'There are {len(tall_men)-len(short_men)} more tall men than s
24
25
```

In [3]:

```
1 height_differentiator(4,5,1.5,7,2.5,1.5,3,4,5,6,1.5,3,6)
```

```
invalid input
invalid input
There are 3 short men and 10 tall men
```

Out[3]:

'There are 7 more tall men than short men'

In [29]:

```
#months = input('Hello! Which month would like to check?
   #months = months.lower()
 2
 3
   #def API(months):
 4
   # This code wants to recieve months and values corresponding to the number of months to
 5
   months = input('Hello! Which month would like to check? ')
 6
   months = months.lower()
 7
   mon_range1 =['april','june','september','november']
9
   mon_range2 =['january','march', 'may','july','august', 'october', 'december']
   mon range3 =['february']
10
11
12
   for month in mon range1:
13
        if month in mon range1:
            month value1 =(input(f'This category takes thirty values; Input your values(set
14
15
16
            month value1 =month value1.split(' ')
            month value1 = [float(x)for x in month value1]
17
18
            avg1 = sum(month_value1)/len(month_value1)
            print('The API value for the month is: ', avg1)
19
        elif month in mon_range2:
20
21
            month_value2 = (input(f'This category takes thirty-one values; Input your value
           # month value2 =month value2.split(' ')
22
23
            month value2 = [float(x)for x in month value2]
            avg2 = sum(month_value2)/len(month_value2)
24
            print('The API value for the month is: ', avg2)
25
26
27
        else:
28
            leap mnth value =(input(f'This category takes twenty-eight values; Input your value)
29
            #leap_mnth_value =leap_mnth_value.split(' ')
            leap_mnth_value = [float(x)for x in leap_mnth_value]
30
            leap_avg = sum(leap_mnth_value)/len(leap_mnth_value)
31
32
            print('The API value for the month is: ', avg3
33
34
35
36
   if api status <= 50:</pre>
37
     status = 'Good'
38
   elif api_status >=51 and api_status <= 100:</pre>
39
        status = 'Moderate'
   elif api status >=101 and api status <= 200:</pre>
40
41
        status = 'Unhealthy'
42
   elif api_status >=201 and api_status <= 300:</pre>
      status = 'Very Unhealthy'
43
44
   else:
    # status = 'Hazardous'
45
46
47
48
```

In []:							
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In []:							
1							