1. **def** formula(factor):                            #formula used to determine lift
2. **global** lift
3. lift = lift \* factor + 5
4. **return** lift
6. **def** DFactor(weight):                            #check to determine factor
7. **global** factor
8. **if** weight > 0 **and** weight < 51:
9. factor = 1.0
10. **if** weight > 50 **and** weight < 81:
11. factor = 1.1
12. **if** weight > 80 **and** weight < 101:
13. factor = 1.5
14. **return** factor
16. **while** True:
17. **while** True:
18. **try**:                                    #try code within try if error occurs execute code under except
19. weight = input("enter weight, between 0 and 101, or enter 'exit' to exit the program: ")
20. **if** weight == 'exit':                #check if input string is equal to string exit if so exit()
21. **break**                           #exit() is also possible but results in an error in command prompt
23. weight = float(weight)              #make weight a float to be able to compare to int or float types
25. **if** weight > 0 **and** weight < 101:     #check if float weight is between acceptable limits
26. **break**
27. **else**:
28. **print** ('Entered value is not accepted, please try again:')
29. **except**:                                 #try code within try if error occurs execute code under except
30. **print**('Entered value is not accepted, please try again: ')
31. **try**:
32. lift = 10
33. DFactor(weight)
35. **for** i **in** range(12):                         #loop 12 times
36. i += 1                                  # i+1 because i start counting at 0
37. formula(factor)                         #run formule with factor as input
38. **if** lift < 100:                          #if lift not to high execute next line
39. **print**("After", i,"months, you can lift", int(lift),"kilograms.")
40. **except**:
41. **break**