

./Programming Fundamentals using Python - Part 01/Assignment Set - 03/Assignment on list - Level

```
1: """
2: ARS Gems Store sells different varieties of gems to its customers.
3:
4: Write a Python program to calculate the bill amount to be paid by a customer based on the list of gems
5: and quantity purchased. Any purchase with a total bill amount above Rs.30000 is entitled for 5% discount.
6: If any gem required by the customer is not available in the store, then consider total bill amount to be -1.
7:
8: Assume that quantity required by the customer for any gem will always be greater than 0.
9:
10: Perform case-sensitive comparison wherever applicable.
11: """
12:
13:
14: def calculate_bill_amount(gems_list, price_list, reqd_gems, reqd_quantity):
15:     bill_amount = 0
16:     store = dict(zip(gems_list, price_list))
17:     demand = dict(zip(reqd_gems, reqd_quantity))
18:
19:     for gem in demand.keys():
20:         if gem in store.keys():
21:             bill_amount += store[gem] * demand[gem]
22:         else:
23:             bill_amount = -1
24:             break
25:
26:     if bill_amount > 30000:
27:         bill_amount -= 0.05 * bill_amount
28:
29:     return bill_amount
30:
31:
32: # List of gems available in the store
33: gems_list = ["Emerald", "Ivory", "Jasper", "Ruby", "Garnet"]
34:
35: # Price of gems available in the store. gems_list and price_list have one-to-one correspondence
36: price_list = [1760, 2119, 1599, 3920, 3999]
37:
38: # List of gems required by the customer
39: reqd_gems = ["Ivory", "Emerald", "Garnet"]
40:
41: # Quantity of gems required by the customer. reqd_gems and reqd_quantity have one-to-one correspondence
42: reqd_quantity = [3, 10, 12]
43:
44: bill_amount = calculate_bill_amount(gems_list, price_list, reqd_gems, reqd_quantity)
45: print(bill_amount)
```