

2347265-lab-exercise-2

August 7, 2023

VISHNU SWAROOP P S - 2347265 - MCA B LAB EXERCISE - 2

[1]: #1. Create a LIST with your domain attributes, insert the elements using the `append()`, `insert()`, `extend()` and add any iterables (tuples, sets, dictionaries etc.) to the list (Use all the methods).

```
pharmacy_attributes = []
```

```
pharmacy_attributes.append("Inventory Management")
pharmacy_attributes.append("Prescription Processing")
print(pharmacy_attributes)
```

```
pharmacy_attributes.insert(2, "Drug Interactions Checking")
pharmacy_attributes.insert(4, "Pharmacist Dashboard")
print(pharmacy_attributes)
```

```
tuple = ("Pharmacy Analytics", "Barcode Scanning", "e-Prescriptions") print(tuple)
pharmacy_attributes.extend(tuple)
print(pharmacy_attributes)
```

```
set = {"Drug Pricing", "Pharmacy Billing"}
print(set)
pharmacy_attributes.extend(set)
print(pharmacy_attributes)
```

```
dict = {"Robotic Dispensing": True, "Electronic Health Records": True} print(dict)
pharmacy_attributes.extend(dict.keys())
```

```
print(pharmacy_attributes)
```

```
['Inventory Management', 'Prescription Processing']
['Inventory Management', 'Prescription Processing', 'Drug Interactions Checking',
'Pharmacist Dashboard']
```

1

```
('Pharmacy Analytics', 'Barcode Scanning', 'e-Prescriptions') ['Inventory Management',
'Prescription Processing', 'Drug Interactions Checking', 'Pharmacist Dashboard',
'Pharmacy Analytics', 'Barcode Scanning', 'e-Prescriptions']
{'Pharmacy Billing', 'Drug Pricing'}
```

```
['Inventory Management', 'Prescription Processing', 'Drug Interactions Checking',
'Pharmacist Dashboard', 'Pharmacy Analytics', 'Barcode Scanning', 'e-Prescriptions',
'Pharmacy Billing', 'Drug Pricing']
{'Robotic Dispensing': True, 'Electronic Health Records': True} ['Inventory Management',
'Prescription Processing', 'Drug Interactions Checking', 'Pharmacist Dashboard',
'Pharmacy Analytics', 'Barcode Scanning', 'e-Prescriptions', 'Pharmacy Billing', 'Drug
Pricing', 'Robotic Dispensing', 'Electronic Health Records']
```

[6]: #2 Create a list with numeric and perform the following operations. # a. Write a program to swap the first and last elements in a list. # b. Write a program to find the sum of the digits in a list. # c. Write a program to find the smallest element in a list.

```
num_list = [10, 3, 75, 28, 23, 45]
num_list[0], num_list[-1] = num_list[-1], num_list[0]
print("After swapping:", num_list)
added = sum(num_list)
print("Total sum:", added)
smallest = min(num_list)
print("Smallest :", smallest)
```

After swapping: [45, 3, 75, 28, 23, 10]
Total sum: 184
Smallest : 3

[1]: # ii) Dictionaries

a. Sort the dictionaries in ascending order based on the Key of the dictionary.

```
pharmacy_inventory = {'Aspirin': 100, 'Paracetamol': 50, 'Cough Syrup': 75, 'Antibiotics': 30, 'Vitamin C': 60}

sorted_inventory = dict(sorted(pharmacy_inventory.items()))

print("Pharmacy Inventory (Sorted by Key):")
for item, quantity in sorted_inventory.items():
    print(f"{item}: {quantity}")
```

Pharmacy Inventory (Sorted by Key):
Antibiotics: 30
Aspirin: 100

2

Cough Syrup: 75
Paracetamol: 50
Vitamin C: 60

[7]: # b. Create the dictionary with Numeric as Value in Key – Value pair and find the sum of all the values in the Dictionary.

```

pharmacy_dict = {
    'paracetamol': 100,
    'aspirin': 75,
    'ibuprofen': 50,
    'antacid': 121,
    'antibiotic': 200
}

total_stock = sum(pharmacy_dict.values())

print("Pharmacy Dictionary:")
for key, value in pharmacy_dict.items():
    print(key, ":", value)

print("Sum of all values in the dictionary:", total_stock)

```

Pharmacy Dictionary:
 paracetamol : 100
 aspirin : 75
 ibuprofen : 50
 antacid : 121
 antibiotic : 200
 Sum of all values in the dictionary: 546

[8]: # c. Write a Python code to demonstrate the sorting in descending order of values with lambda function.

```

pharmacy_dict = {
    'paracetamol': 100,
    'aspirin': 75,
    'nocold': 50,
    'antacid': 120,
    'antibiotic': 200
}

sorted_pharmacy_dict = dict(sorted(pharmacy_dict.items(), key=lambda item: -item[1], reverse=True))

print("Sorted pharmacy dictionary in descending order of stock quantities:")
for medicine, quantity in sorted_pharmacy_dict.items():
    print(medicine, ":", quantity)

```

Sorted pharmacy dictionary in descending order of stock quantities: antibiotic :
 200
 antacid : 120
 paracetamol : 100

aspirin : 75
nocold : 50