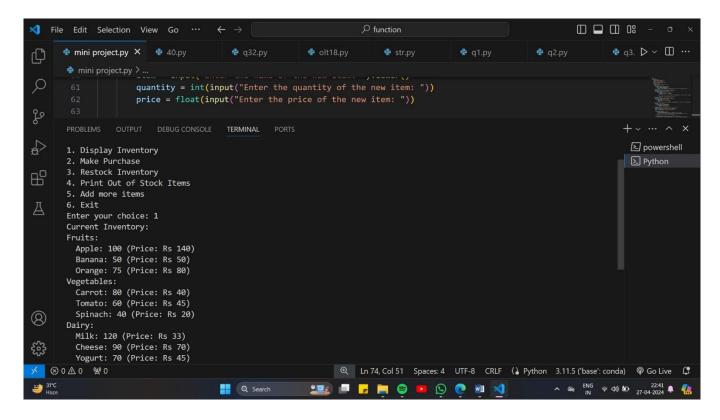
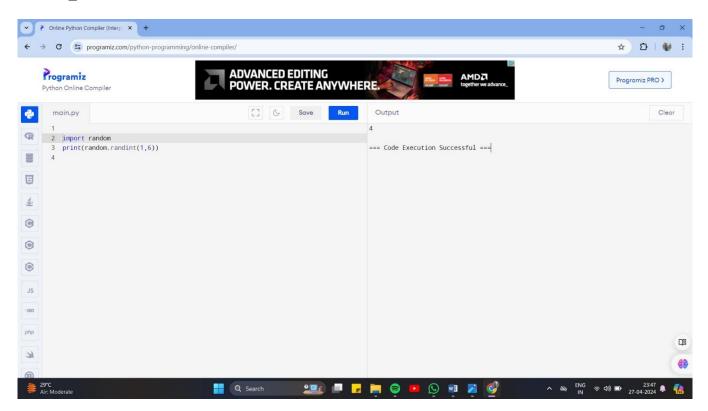
Inventory System



```
# inventory = {
       'fruits': {
           'apple': {'quantity': 100, 'price': 140}, 'banana': {'quantity': 50, 'price': 50},
#
#
           'orange': {'quantity': 75, 'price': 80}
#
#
#
       'vegetables': {
#
           'carrot': {'quantity': 80, 'price': 40},
           'tomato': {'quantity': 60, 'price': 45},
           'spinach': {'quantity': 40, 'price': 20}
#
#
      },
#
       'dairy': {
           'milk': {'quantity': 120, 'price': 33},
#
#
           'cheese': {'quantity': 90, 'price': 70},
           'yogurt': {'quantity': 70, 'price': 45}
#
#
      }
#
 }
 choice = 0
  while choice != 6:
      print("\n1. Display Inventory")
      print("2. Make Purchase")
#
#
      print("3. Restock Inventory")
      print("4. Print Out of Stock Items")
#
#
      print("5. Add more items")
```

```
print("6. Exit")
      choice = int(input("Enter your choice: "))
      if choice == 1:
          print("Current Inventory:")
          for category, items in inventory.items():
              print(f"{category.capitalize()}:")
              for item, details in items.items():
                  print(f" {item.capitalize()}: {details['quantity']}
(Price: Rs {details['price']})")
      elif choice == 2:
          item = input("Enter the item to purchase: ").lower()
          quantity = int(input("Enter the quantity to purchase: "))
          for category, items in inventory.items():
              if item in items:
                  if items[item]['quantity'] >= quantity:
                      items[item]['quantity'] -= quantity
                      print(
                          f"Successfully purchased {quantity}
{item.capitalize()}. Remaining quantity: {items[item]['quantity']}.")
                  else:
#
                      print("Error: Not enough quantity in stock.")
#
      elif choice == 3:
          item = input("Enter the item to restock: ").lower()
          quantity = int(input("Enter the quantity to restock: "))
          for category, items in inventory.items():
              if item in items:
                  items[item]['quantity'] += quantity
                  print(
                      f"Successfully restocked {quantity}
{item.capitalize()}. Total quantity: {items[item]['quantity']}.")
     elif choice == 4:
          print("Out of Stock Items:")
          for category, items in inventory.items():
              for item, details in items.items():
                  if details['quantity'] == 0:
                      print(f" {item.capitalize()}")
     elif choice == 5:
          category = input("Enter the category of the new item:
").lower()
          item = input("Enter the name of the new item: ").lower()
          quantity = int(input("Enter the quantity of the new item: "))
          price = float(input("Enter the price of the new item: "))
          if category in inventory:
              if item not in inventory[category]:
                  inventory[category][item] = {'quantity': quantity,
'price': price}
                  print(f"Successfully added {item.capitalize()} to
{category.capitalize()} category.")
              else:
                  print("Error: Item already exists in the inventory.")
          else:
              inventory[category] = {item: {'quantity': quantity,
'price': price}}
              print(f"Successfully added {item.capitalize()} to a new
category: {category.capitalize()}.")
     elif choice != 6:
          print("Invalid choice. Please try again.")
```

Roll_Dice



```
# import random
# print(random.randint(1,6))
```

Rock_Paper_Scissors

```
	imes File Edit Selection View Go \cdots \leftarrow 	o
                                                                                                                        ▷ ∨ □ …
      EXPLORER

₱ g32.pv

                                                                                           olt18.pv
                                                                                                          str.py
                           mini project.pv

∨ OPEN EDITORS

                            diceroll.py >.
         mini project.py
                             8 user points = 0
                                  computer_points = 0
       X 🏓 diceroll.py
                                  for round_number in range(no_of_rounds):
          40.py
مړ
                                     user_action = input(f"Round {(round_number+1)}: Rock, Paper or Scissors: ")
         q32.pv
          olt18.py
          str.py
                                          user_action = input("Round {}: Rock, Paper or Scissors: ".format(round_number+1)).lc
                                      computer_action = random.choice(["rock", "paper", "scissors"])
         d1.py olt2
                                      print("Computer chose: {}".format(computer_action))
         q2.py olt2
                                      if user action == computer action:
         q3.py olt2
                            PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
∨ olt2
                                                                                                                      ≥ powershell
                            PS C:\Users\yadve\OneDrive\Desktop\python\python\function> & C:\Users/yadve/anaconda3/python.ex
      38.py
                            e c:/Users/yadve/OneDrive/Desktop/python/python/function/diceroll.py

    ∑ Python

      39.py
                            Enter the number of rounds: 2
                            Round 1: Rock, Paper or Scissors: paper
      diceroll.py
                            Computer chose: rock
      function.py
                            You win this round!
                            Round 2: Rock, Paper or Scissors: scissors
      mini project.py
                            Computer chose: scissors
      ≣ olt1
                            It's a tie!
      e olt1q5.py
   PS C:\Users\yadve\OneDrive\Desktop\python\python\function>
                                                             🔍 Ln 5, Col 2 Spaces: 4 UTF-8 CRLF 🚷 Python 3.11.5 ('base': conda) 🖗 Go Live 🚨
                                                            Q Search
```

```
#
# import random
# no of rounds=int(input("Enter the number of rounds: "))
# user points = 0
\# computer points = 0
# for round number in range(no of rounds):
     user action = input(f"Round {(round number+1)}: Rock, Paper or
Scissors: ")
     while user action not in ["rock", "paper", "scissors"]:
#
          print("Invalid input. Please try again.")
          user action = input("Round {}: Rock, Paper or Scissors:
".format(round number+1)).lower()
     computer action = random.choice(["rock", "paper", "scissors"])
     print("Computer chose: {}".format(computer action))
#
      if user action == computer action:
          print("It's a tie!")
     elif (user action == "rock" and computer action == "scissors") or \
           (user action == "scissors" and computer action == "paper") or
           (user action == "paper" and computer action == "rock"):
          user points += 1
          print("You win this round!")
     else:
          computer points += 1
          print("Computer wins this round!")
# if user points > computer points:
#
     print("\nYou Win :)")
# else:
     print("\nYou Lose :(")
```

#voting System:

```
	imes File Edit Selection View Go \cdots \leftarrow 	o

    ∫ function

                                                                                                              EXPLORER

♦ votingsystem.py X ♦ 40.py

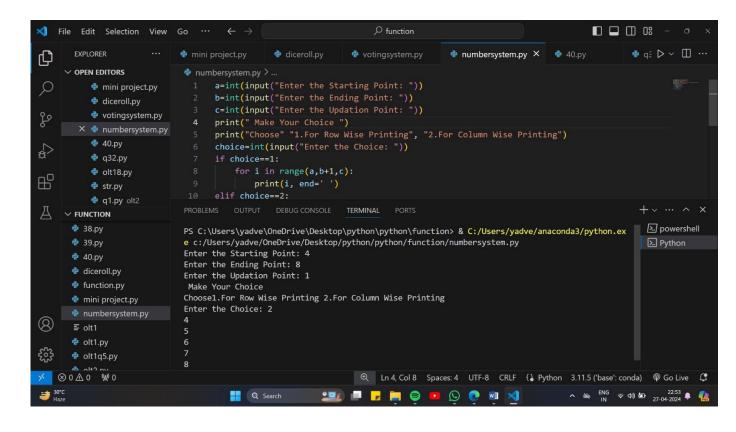
                                                                                                 q32.py

∨ OPEN EDITORS

                            🕏 votingsystem.py > ..
                                  Name=input("PLease Enter your Name: ").capitalize()
          mini project.py
                                   Age=int(input("Please Enter Your Age: "))
          diceroll.py
                                   Voter_ID_No=int(input("Please Enter your Voter ID Number: "))
                                  if Age<18:
          40.py
                                      print("You are not Eligible for Voting")
          🕏 q32.py
          olt18.py
          str.py
                                       choice=int(input("Enter the Choice: "))
          🕏 q1.py olt2
                                      if choice==1:
          q2.py olt2
    ∨ FUNCTION
                                                                                                                         ≥ powershell
                            PS C:\Users\yadve\OneDrive\Desktop\python\puthon\function> & C:/Users/yadve/anaconda3/python.ex
                            e c:/Users/yadve/OneDrive/Desktop/python/python/function/votingsystem.py
                                                                                                                        ≥ Python
      ≣ olt14,py
                            PLease Enter your Name: yadvendra
      olt18.py
                            Please Enter Your Age: 19
                            Please Enter your Voter ID Number: 23456
      🕏 q32.py
                            Please Make your Party Choice:
      q33.py
                            Press1.BJP 2.CONG 3.S.P 4.AAP
      shourya.py
                            Enter the Choice: 2
      smallword.py
                             CONG
                             Thank You For voting
      str.py
                            PS C:\Users\yadve\OneDrive\Desktop\python\python\function>
      votingsystem.py
   ⊗ 0 1 0 1 0 ⊗
                                                             🔍 Ln 17, Col 23 Spaces: 4 UTF-8 CRLF () Python 3.11.5 ('base': conda) 🖗 Go Live 🗘
                                                        💷 🔳 🙀 🗎 😂 🔼 🕓 🙋 🐠 💆
                                                                                                        Q Search
```

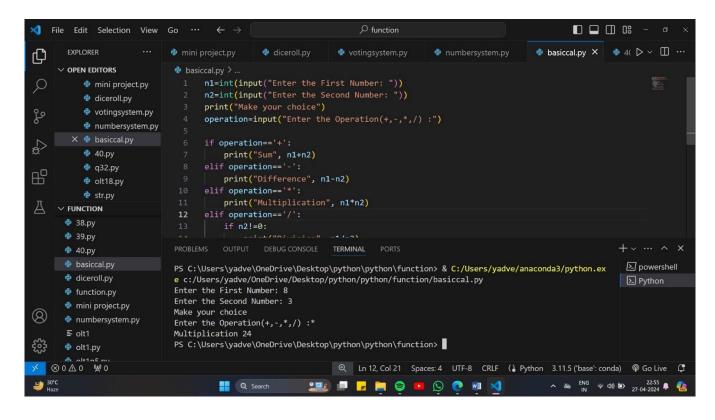
```
# Name=input("PLease Enter your Name: ").capitalize()
# Age=int(input("Please Enter Your Age: "))
# Voter ID No=int(input("Please Enter your Voter ID Number: "))
# if Age<18:
#
     print("You are not Eligible for Voting")
     print("Please Make your Party Choice: ")
     print("Press" "1.BJP", "2.CONG", "3.S.P", "4.AAP")
#
#
      choice=int(input("Enter the Choice: "))
#
      if choice==1:
#
          print(" BJP ")
#
     elif choice==2:
#
          print(" CONG ")
#
     elif choice==3:
          print(" S.P ")
#
     elif choice==4:
          print(" AAP ")
#
     else:
          ("You choose an Invalid Choice: ")
      print("Thank You For voting")
```

Number system:



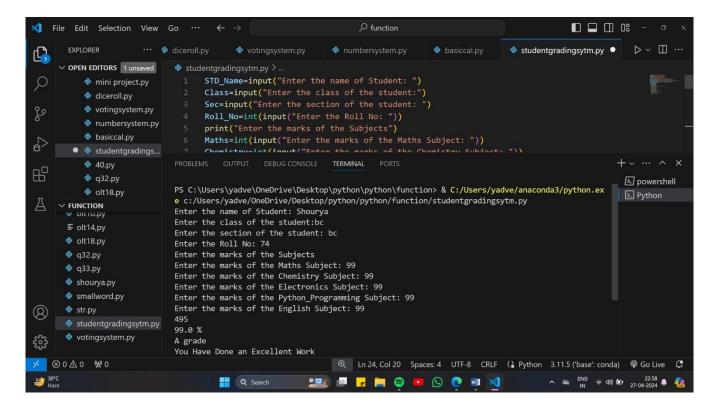
```
# a=int(input("Enter the Starting Point: "))
# b=int(input("Enter the Ending Point: "))
# c=int(input("Enter the Updation Point: "))
# print("## Make Your Choice ##")
# print("Choose" "1.For Row Wise Printing", "2.For Column Wise Printing")
# choice=int(input("Enter the Choice: "))
# if choice==1:
      for i in range (a,b+1,c):
          print(i, end=' ')
 elif choice==2:
#
      for i in range (a,b+1,c):
#
          print(i)
 else:
      ("Invalid Choice")
```

#Basic Calculator:

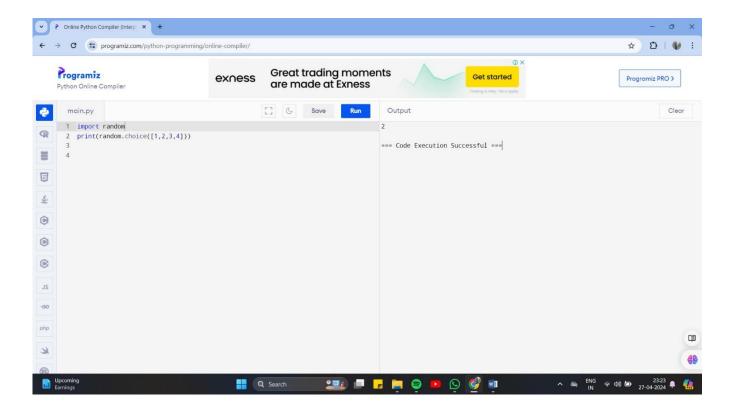


```
# n1=int(input("Enter the First Number: "))
# n2=int(input("Enter the Second Number: "))
# print("Make your choice")
\# operation=input("Enter the Operation(+,-,*,/) :")
# if operation=='+':
     print("Sum", n1+n2)
 elif operation=='-':
     print("Difference", n1-n2)
 elif operation=='*':
#
     print("Multiplication", n1*n2)
#
 elif operation=='/':
#
      if n2!=0:
#
          print("Division", n1/n2)
      else:
          print("Can`t Divided by 0")
#
#
     print("Invalid Choice/Operation")
```

#Student grading system:

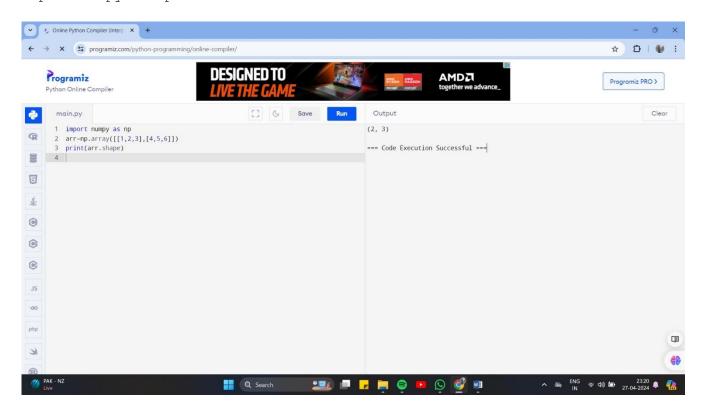


```
# STD Name=input("Enter the name of Student: ")
# Class=input("Enter the class of the student:")
# Sec=input("Enter the section of the student: ")
# Roll No=int(input("Enter the Roll No: "))
# print("Enter the marks of the Subjects")
# Maths=int(input("Enter the marks of the Maths Subject: "))
# Chemistry=int(input("Enter the marks of the Chemistry Subject: "))
# Electronics=int(input("Enter the marks of the Electronics Subject: "))
# Python Programming=int(input("Enter the marks of the Python Programming
Subject: "))
# English=int(input("Enter the marks of the English Subject: "))
# Total Marks=Maths+Chemistry+Electronics+Python Programming+English
# Percentage=Total Marks/5
# print(Total_Marks)
# print(Percentage,"%")
# if Percentage>90:
     print("A grade")
     print("You Have Done an Excellent Work")
 elif Percentage>75:
     print("B Grade")
#
     print("Good job")
 elif Percentage>55:
#
     print("C Grade")
#
     print("You need to improve")
 elif Percentage>35:
     print("D Grade")
      print("You need to work hard")
#
#
 else:
     print("You Failed")
# import random
```



print(random.choice([1,2,3,4]))

import numpy as np



arr=np.array([[1,2,3],[4,5,6]])
print(arr.shape)