CODING (Python)

```
def main():
    c = 'y'
    while c == 'y':
        loginwindow = input("TO Login as USER (Enter U)\nTO
Login as ADMIN (Enter A) \n: ").upper()
        print()
        if loginwindow == "A":
            adminwindow()
        elif loginwindow == "U":
            program()
        else:
            print("Invalid Input")
            exit()
    else:
        print('wrong input')


def program():
    cont = "y"
    if cont == "y":
        def pcgaming():
            import pandas as pd
            import mysql.connector
            pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
            print("Can I Run It ?")
            print(
                "System requirement application to find games
that can run on your computer,\nAnd to provide you with Game
Price, "
                "Price of the PC(Based upon the configuration
provided by you + other important parts required to build the
PC)\n"
                "What games your laptop/PC can run - from our
list of over 70 PC games. \n")
            print("Tell us about your PC specification from the
following option's\n ")
            graphics = (input("Choose from the folLowing
GRAPHICS CARD\n"
```

```
                             "   Geforce GTX 1050 Ti (ENTER
g1)\n "
                             "  Geforce GTX 1060    (ENTER
g2)\n "
                             "  Geforce GTX 1070 Ti (ENTER
g3)\n "
                             " :  ")).lower()
           print()
           g1 = "Geforce GTX 1050 Ti"
           g2 = "Geforce GTX 1060"
           g3 = "Geforce GTX 1070 Ti"
           if graphics == "g1":
               g = g1
           elif graphics == "g2":
               g = g2
           elif graphics == "g3":
               g = g3
           else:
               return "ERROR"
           processor = (input("Choose from the folLowing
PROCESSOR\n"
                              "  Intel core i3 (ENTER p1)\n "
                              " Intel core i5 (ENTER p2)\n "
                              " Intel core i7 (ENTER p3)\n "
                              " :  ")).lower()
           print()
           p1 = "i3"
           p2 = "i5"
           p3 = "i7"
           if processor == "p1":
               p = p1
           elif processor == "p2":
               p = p2
           elif processor == "p3":
               p = p3
           else:
               return "ERROR"
           memory = (input("Choose from the folLowing
MEMORY\n"
                           " 4GB RAM (ENTER r1)\n"
                           " 8GB RAM (ENTER r2)\n"
                           "16GB RAM (ENTER r3)\n"
                           " :  ")).lower()
           r1 = "4GB"
```

```
            r2 = "8GB"
            r3 = "16GB"
            if memory == "r1":
                r = r1
            elif memory == "r2":
                r = r2
            elif memory == "r3":
                r = r3
            else:
                return "ERROR"
            cursor = pcgbm.cursor()
            cursor.execute(
                f'select
G_name,storage_GB_,price_$_,ReviewScore_outof100,PCprice_Rs
from pcgbm where processor="{p}" and graphics="{g}" and
memory="{r}"')
            myresult = cursor.fetchall()
            data = pd.DataFrame(myresult, columns=['Game Name',
'Storage(GB)', 'Price($)', 'ReviewScore(out of 100)',

'PCprice(Rs)'])
            pd.set_option('display.max_rows' and
'display.max_columns', None)
            for row in range(len(data)):
                print()
                print(data.loc[row])
                print()

            def graph():
                def again():
                    again1 = input("\nDO YOU WANT TO SEE MORE
GRAPHS (ENTER Y) : ").upper()
                    if again1 == 'Y':
                        graph()

                import matplotlib.pyplot as mat

                def mypieU():
                    label1 = ['Geforce GTX 1050 Ti', 'Geforce
GTX 1060', 'Geforce GTX 1070 Ti']
                    sizes = [23, 27, 21]
                    colors1 = ['yellowgreen', 'lightskyblue',
'magenta']
```

```
                   mat.title("Games in PCGBM for various
Graphics card")
                   mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
                           startangle=140)
                   mat.axis('equal')
                   a = mat.show()
                   print(a)

                   label1 = ['i3', 'i5', 'i7']
                   sizes = [25, 22, 24]
                   colors1 = ['red', 'blue', 'magenta']
                   mat.title("Games in PCGBM for various
Processors")
                   mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
                           startangle=140)
                   mat.axis('equal')
                   b = mat.show()
                   print(b)

                   label1 = ['4GB', '8GB', '16GB']
                   sizes = [24, 19, 28]
                   colors1 = ['lightskyblue', 'yellowgreen',
'brown']
                   mat.title("Games in PCGBM for various RAM")
                   mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
                           startangle=140)
                   mat.axis('equal')
                   c = mat.show()
                   print(c)

                   label1 = ['Free', '1 to 20', '$21 to $40',
'$41 to $60', '$61 to $100']
                   sizes = [14, 22, 20, 12, 3]
                   colors1 = ['red', 'blue', 'magenta',
'yellowgreen', 'brown']
                   mat.title("Games in PCGBM for various
prices($)\n")
                   mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
                           startangle=140)
                   mat.axis('equal')
                   d = mat.show()
                   print(d)

                   label1 = ['40 to 60', '61 to 80', '81 to
100']
                   sizes = [3, 19, 48]
                   colors1 = ['red', 'blue', 'cyan', ]
                   mat.title("Games in PCGBM for various
Review Score out of 100\n")
                   mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
                           startangle=140)
                   mat.axis('equal')
                   e = mat.show()
                   print(e)

               def barU():
                   import numpy as np
                   import matplotlib.pyplot as mat15
                   objects = ('Geforce GTX 1050 Ti', 'Geforce
GTX 1060', 'Geforce GTX 1070 Ti')
                   y_pos = np.arange(len(objects))
                   types = (23, 27, 21)
                   mat15.bar(y_pos, types, align='center',
color='yellowgreen')
                   mat15.xticks(y_pos, objects)
                   mat15.ylabel('Number Of Games')
                   mat15.title('Number Of Games According to
Graphics Card')
                   mat15.show()

                   import numpy as np
                   import matplotlib.pyplot as mat14
                   objects = ('i3', 'i5', 'i7')
                   y_pos = np.arange(len(objects))
                   types = (25, 22, 24)
                   mat14.bar(y_pos, types, align='center',
color='lightgreen')
                   mat14.xticks(y_pos, objects)
                   mat14.ylabel('Number Of Games')
                   mat14.title('Number Of Games According to
processor')
                   mat14.show()
                   import numpy as np
                   import matplotlib.pyplot as mat13
                   objects = ('4GB', '8GB', '16GB')
                   y_pos = np.arange(len(objects))
                   types = (24, 19, 28)
                   mat13.bar(y_pos, types, align='center',
color='lightskyblue')
                   mat13.xticks(y_pos, objects)
                   mat13.ylabel('Number Of Games')
                   mat13.title('Number Of Games According to
RAM')
                   mat13.show()

                   import numpy as np
                   import matplotlib.pyplot as mat12
                   objects = ('Free', '1 to 20', '$21 to $40',
'$41 to $60', '$61 to $100')
                   y_pos = np.arange(len(objects))
                   types = (14, 22, 20, 12, 3)
                   mat12.bar(y_pos, types, align='center',
color='brown')
                   mat12.xticks(y_pos, objects)
                   mat12.ylabel('Number Of Games')
                   mat12.title('Number Of Games According to
Various prices($)')
                   mat12.show()

                   import numpy as np
                   import matplotlib.pyplot as mat11
                   objects = ('40 to 60', '61 to 80', '81 to
100')
                   y_pos = np.arange(len(objects))
                   types = (3, 19, 48)
                   mat11.bar(y_pos, types, align='center',
color='magenta')
                   mat11.xticks(y_pos, objects)
                   mat11.ylabel('Number Of Games')
                   mat11.title('Number Of Games According to
Various review score(out of 100)')
                   mat11.show()

               def lineU():
                   label1 = ['Geforce GTX 1050 Ti', 'Geforce
GTX 1060', 'Geforce GTX 1070 Ti']
```

```
sizes = [23, 27, 21]
import matplotlib.pyplot as mat10
mat10.plot(label1, sizes)
mat10.title("Games in PCGBM for various Graphics card")
mat10.xlabel('Graphics card')
mat10.ylabel('No. Of Games')
mat10.show()

label1 = ['i3', 'i5', 'i7']
sizes = [25, 22, 24]
import matplotlib.pyplot as mat9
mat9.plot(label1, sizes)
mat9.title("Games in PCGBM for various Processors")
mat9.xlabel('Processors')
mat9.ylabel('No. Of Games')
mat9.show()

label1 = ['4GB', '8GB', '16GB']
sizes = [24, 19, 28]
import matplotlib.pyplot as mat8
mat8.plot(label1, sizes)
mat8.title("Games in PCGBM for various RAM")
mat8.xlabel('Ram')
mat8.ylabel('No. Of Games')
mat8.show()

label1 = ['Free', '1 to 20', '$21 to $40', '$41 to $60', '$61 to $100']
sizes = [14, 22, 20, 12, 3]
import matplotlib.pyplot as mat7
mat7.plot(label1, sizes)
mat7.title("Games in PCGBM for various prices($)\n")
mat7.xlabel('Prices($)')
mat7.ylabel('No. Of Games')
mat7.show()

label1 = ['40 to 60', '61 to 80', '81 to 100']
sizes = [3, 19, 48]
import matplotlib.pyplot as mat6
```

```
                    mat6.plot(label1, sizes)
                    mat6.title("Games in PCGBM for various
Review Score out of 100\n")
                    mat6.xlabel('Review score')
                    mat6.ylabel('No. Of Games')
                    mat6.show()

                def scatterU():

                    import matplotlib.pyplot as mat5
                    label1 = ['Geforce GTX 1050 Ti', 'Geforce
GTX 1060', 'Geforce GTX 1070 Ti']
                    sizes = [23, 27, 21]
                    mat5.scatter(label1, sizes, c="blue")
                    mat5.show()

                    import matplotlib.pyplot as mat4
                    label1 = ['i3', 'i5', 'i7']
                    sizes = [25, 22, 24]
                    mat4.scatter(label1, sizes, c="green")
                    mat4.show()

                    import matplotlib.pyplot as mat3
                    label1 = ['4GB', '8GB', '16GB']
                    sizes = [24, 19, 28]
                    mat3.scatter(label1, sizes, c="green")
                    mat3.show()

                    import matplotlib.pyplot as mat2
                    label1 = ['Free', '1 to 20', '$21 to $40',
'$41 to $60', '$61 to $100']
                    sizes = [14, 22, 20, 12, 3]
                    mat2.scatter(label1, sizes, c="green")
                    mat2.show()

                    import matplotlib.pyplot as mat1
                    label1 = ['40 to 60', '61 to 80', '81 to
100']

                    sizes = [3, 19, 48]
                    mat1.scatter(label1, sizes, c="green")
                    mat1.show()

                print('\nSelect the graph you want to see')
                print('1.Pie chart')
```

```
               print('2.Bar graph')
               print('3.Line Graph')
               print('4.Scatter plot')
               choice = int(input('Enter choice of graphs :
'))
               if choice == 1:
                   mypieU()
                   again()
               elif choice == 2:
                   barU()
                   again()
               elif choice == 3:
                   lineU()
                   again()
               elif choice == 4:
                   scatterU()
                   again()
               else:
                   print("\nWRONG INPUT \nCHOOSE AGAIN")
                   graph()

           forgraphs1 = input("\nIF YOU WANT TO SEE GRAPHS
(ENTER Y) : ").lower()
           if forgraphs1 == "y":
               graph()

       print(pcgaming())
   rerun = input("\nDo you want run the program again \nIf yes
then type y \nElse enter anything\n: ").lower()
   print()
   if rerun == 'y':
       main()
       print()
   else:
       print("I wish you have a Good Day!!")
       exit()


def adminwindow():
   loginid = "pcgbm"
   password = "****"
   lid = input("Enter LoginID : ")
   passwd = input("Enter Password : ")
```

```
if lid == loginid and passwd == password:
    print("Access Granted!!\n")
    print("1. Add Record")
    print("2. Delete record")
    print("3. Show records")
    print("4. Update records")
    print("5. Graphs")
    print("6. Exit")
    print()
    choice = int(input("Enter choice : "))
    if choice == 1:
        adddata()
    elif choice == 2:
        deldata()
    elif choice == 3:
        fetchdata()
    elif choice == 4:
        print("What do you want to Update ?\n")
        print("1. Game name")
        print("2. Processor")
        print("3. Memory")
        print("4. Storage")
        print("5. Price")
        print("6. Review Score")
        print("7. Graphics")
        print("8. PC price")
        choice = int(input("Enter Choice : "))
        if choice == 1:
            updateG_name()
        elif choice == 2:
            updateprocessor()
        elif choice == 3:
            updatememory()
        elif choice == 4:
            updatestorage()
        elif choice == 5:
            updateprice()
        elif choice == 6:
            updateReviewScore()
        elif choice == 7:
            updategraphics()
        elif choice == 8:
            updatePCprice()
        else:
                print("wrong input")
        elif choice == 5:
            graphs()
            print()
        elif choice == 6:
            print("Exiting")
            exit()

        else:
            print("wrong input")
    else:
        print("Exiting")
        exit()


def adddata():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    p = str(input("processor from Intel core i3, Intel core i5
and Intel core i7 : "))
    m = str(input("memory from 4GB, 8GB and 16GB : "))
    gr = str(input("graphics from Geforce GTX 1050 Ti, Geforce
GTX 1060 and Geforce GTX 1070 Ti : "))
    s = int(input("storage_GB_ : "))
    pr = int(input("price_$_ : "))
    pl = str(input("platform : ")).upper()
    r = str(input("ReviewScore_outof100 : "))
    pc = int(input("PCprice_Rs : "))
    cursor = pcgbm.cursor()
    cursor.execute(f'insert into pcgbm
values("{g}","{p}","{m}","{gr}","{s}","{pr}","{pl}","{r}","{pc
}");')
    pcgbm.commit()
    print("records added")

    r1 = input("Do you want to ADD more records : ")
    if r1 == "y":
        adddata()

    print()
    ad1 = input("Do you want to return to Admin Window : ")
    if ad1 == "y":
        adminwindow()
    else:
        exit()


 def deldata():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
 user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    cursor = pcgbm.cursor()
    cursor.execute(f'delete from pcgbm where G_name="{g}"')
    pcgbm.commit()
    print("records deleted")
    r2 = input("Do you want to DELETE more records : ")
    if r2 == "y":
        deldata()

    print()
    ad2 = input("Do you want to return to Admin Window : ")
    if ad2 == "y":
        adminwindow()
    else:
        exit()


 def fetchdata():
    import mysql.connector
    from mysql.connector import Error

    try:
        pcgbm = mysql.connector.connect(host='localhost',
                                        database='pcgbm',
                                        user='root',
                                        password='abc@123')

        sql_select_query = "select * from pcgbm"
        cursor = pcgbm.cursor()
        cursor.execute(sql_select_query)
        records = cursor.fetchall()
        print("Total number of rows in database is : ",
 cursor.rowcount)

        print("\nPrinting each record")
```

```
        for row in records:
            print("G_name = ", row[0], )
            print("processor = ", row[1])
            print("memory = ", row[2])
            print("graphics  = ", row[3])
            print("storage_GB_ = ", row[4])
            print("price_$_ = ", row[5])
            print("platform = ", row[6])
            print("ReviewScore_outof100 = ", row[7])
            print("PCprice_Rs = ", row[8], "\n")
    except Error as e:
        print("Error reading data from MySQL table", e)

    print()
    ad13 = input("Do you want to return to Admin Window : ")
    if ad13 == "y":
        adminwindow()
    else:
        exit()


def updateG_name():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("Old game name :  "))
    g1 = str(input("New Game Name : "))
    cursor = pcgbm.cursor()
    cursor.execute(f'update pcgbm set G_name="{g1}" where
G_name="{g}"')
    pcgbm.commit()
    print("records updated")
    print()
    r3 = input("Do you want to UPDATE more Games name : ")
    if r3 == "y":
        updateG_name()

    print()
    ad23 = input("Do you want to return to Admin Window : ")
    if ad23 == "y":
        adminwindow()
    else:
        exit()
```

```
def updateprocessor():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    p1 = str(input("New processor:"))
    cursor = pcgbm.cursor()
    cursor.execute(f'update pcgbm set processor="{p1}" where
G_name="{g}"')
    pcgbm.commit()
    print("records updated")

    r4 = input("Do you want to UPDATE processor of more games :
")
    if r4 == "y":
        updateprocessor()

    print()
    a1d2 = input("Do you want to return to Admin Window : ")
    if a1d2 == "y":
        adminwindow()
    else:
        exit()


def updategraphics():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    gr1 = str(input("New graphics:"))
    cursor = pcgbm.cursor()
    cursor.execute(f'update pcgbm set graphics="{gr1}" where
G_name="{g}"')
    pcgbm.commit()
    print("records updated")

    r5 = input("Do you want to UPDATE Graphics of more Games :
")
    if r5 == "y":
        updategraphics()

    print()
    a2d2 = input("Do you want to return to Admin Window : ")
    if a2d2 == "y":
        adminwindow()
    else:
        exit()


def updatememory():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    m1 = str(input("New memory:"))
    cursor = pcgbm.cursor()
    cursor.execute(f'update pcgbm set memory="{m1}" where
G_name="{g}"')
    pcgbm.commit()
    print("records updated")

    r6 = input("Do you want to UPDATE Memory of more Games : ")
    if r6 == "y":
        updatememory()

    print()
    a3d2 = input("Do you want to return to Admin Window : ")
    if a3d2 == "y":
        adminwindow()
    else:
        exit()


def updatestorage():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    s1 = str(input("New storage:"))
    cursor = pcgbm.cursor()
    cursor.execute(f'update pcgbm set storage_GB_="{s1}" where
G_name="{g}"')
    pcgbm.commit()
    print("records updated")
    r7 = input("Do you want to UPDATE Storage of more Games :
")
    if r7 == "y":
        updatestorage()

    print()
    ad24 = input("Do you want to return to Admin Window : ")
    if ad24 == "y":
        adminwindow()
    else:
        exit()


def updateprice():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    pr1 = str(input("New price:"))
    cursor = pcgbm.cursor()
    cursor.execute(f'update pcgbm set price_$_="{pr1}" where
G_name="{g}"')
    pcgbm.commit()
    print("records updated")

    r8 = input("Do you want to UPDATE Price of more Games : ")
    if r8 == "y":
        updateprice()

    print()
    ad5 = input("Do you want to return to Admin Window : ")
    if ad5 == "y":
        adminwindow()
    else:
        exit()


def updateReviewScore():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost",
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    r1 = str(input("New ReviewScore:"))
    cursor = pcgbm.cursor()
    cursor.execute(f'update pcgbm set 
ReviewScore_outof100="{r1}" where G_name="{g}"')
    pcgbm.commit()
    print("records updated")

    r9 = input("Do you want to UPDATE ReviewScore of more Games 
: ")
    if r9 == "y":
        updateReviewScore()

    print()
    ad6 = input("Do you want to return to Admin Window : ")
    if ad6 == "y":
        adminwindow()
    else:
        exit()


def updatePCprice():
    import mysql.connector
    pcgbm = mysql.connector.connect(host="localhost", 
user="root", passwd='abc@123', database="pcgbm")
    g = str(input("game name :  "))
    pc1 = str(input("New PCprice:"))
    cursor = pcgbm.cursor()
    cursor.execute(f'update pcgbm set PCprice_Rs="{pc1}" where 
G_name="{g}"')
    pcgbm.commit()
    print("records updated")

    r10 = input("Do you want to UPDATE PCprice of more Games : 
")
    if r10 == "y":
        updatePCprice()

    print()
    ad7 = input("Do you want to return to Admin Window : ")
    if ad7 == "y":
        adminwindow()
    else:
        exit()


def graphs():
```

```
def again10():
    again2 = input("\nDO YOU WANT TO SEE MORE GRAPHS (ENTER
Y) : ").upper()
    if again2 == 'Y':
        graphs()

    print()
    ad9 = input("Do you want to return to Admin Window : ")
    if ad9 == "y":
        adminwindow()
    else:
        exit()

import matplotlib.pyplot as mat

def mypie():
    label1 = ['Geforce GTX 1050 Ti', 'Geforce GTX 1060',
'Geforce GTX 1070 Ti']
    sizes = [23, 27, 21]
    colors1 = ['yellowgreen', 'lightskyblue', 'magenta']
    mat.title("Games in PCGBM for various Graphics card")
    mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
            startangle=140)
    mat.axis('equal')
    a = mat.show()
    print(a)

    label1 = ['i3', 'i5', 'i7']
    sizes = [25, 22, 24]
    colors1 = ['red', 'blue', 'magenta']
    mat.title("Games in PCGBM for various Processors")
    mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
            startangle=140)
    mat.axis('equal')
    b = mat.show()
    print(b)

    label1 = ['4GB', '8GB', '16GB']
    sizes = [24, 19, 28]
    colors1 = ['lightskyblue', 'yellowgreen', 'brown']
    mat.title("Games in PCGBM for various RAM")
```

```
       mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
               startangle=140)
       mat.axis('equal')
       c = mat.show()
       print(c)

       label1 = ['Free', '1 to 20', '$21 to $40', '$41 to
$60', '$61 to $100']
       sizes = [14, 22, 20, 12, 3]
       colors1 = ['red', 'blue', 'magenta', 'yellowgreen',
'brown']
       mat.title("Games in PCGBM for various prices($)\n")
       mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
               startangle=140)
       mat.axis('equal')
       d = mat.show()
       print(d)

       label1 = ['40 to 60', '61 to 80', '81 to 100']
       sizes = [3, 19, 48]
       colors1 = ['red', 'blue', 'cyan', ]
       mat.title("Games in PCGBM for various Review Score out
of 100\n")
       mat.pie(sizes, explode=None, labels=label1,
colors=colors1, shadow=True, autopct='%1.1f%%',
               startangle=140)
       mat.axis('equal')
       d = mat.show()
       print(d)

   def bar():
       import numpy as np
       import matplotlib.pyplot as mat15
       objects = ('Geforce GTX 1050 Ti', 'Geforce GTX 1060',
'Geforce GTX 1070 Ti')
       y_pos = np.arange(len(objects))
       types = (23, 27, 21)
       mat15.bar(y_pos, types, align='center',
color='yellowgreen')
       mat15.xticks(y_pos, objects)
       mat15.ylabel('Number Of Games')
       mat15.title('Number Of Games According to Graphics
Card')
       mat15.show()

       import numpy as np
       import matplotlib.pyplot as mat14
       objects = ('i3', 'i5', 'i7')
       y_pos = np.arange(len(objects))
       types = (25, 22, 24)
       mat14.bar(y_pos, types, align='center',
color='lightgreen')
       mat14.xticks(y_pos, objects)
       mat14.ylabel('Number Of Games')
       mat14.title('Number Of Games According to processor')
       mat14.show()

       import numpy as np
       import matplotlib.pyplot as mat13
       objects = ('4GB', '8GB', '16GB')
       y_pos = np.arange(len(objects))
       types = (24, 19, 28)
       mat13.bar(y_pos, types, align='center',
color='lightskyblue')
       mat13.xticks(y_pos, objects)
       mat13.ylabel('Number Of Games')
       mat13.title('Number Of Games According to RAM')
       mat13.show()

       import numpy as np
       import matplotlib.pyplot as mat12
       objects = ('Free', '1 to 20', '$21 to $40', '$41 to
$60', '$61 to $100')
       y_pos = np.arange(len(objects))
       types = (14, 22, 20, 12, 3)
       mat12.bar(y_pos, types, align='center', color='brown')
       mat12.xticks(y_pos, objects)
       mat12.ylabel('Number Of Games')
       mat12.title('Number Of Games According to Various
prices($)')
       mat12.show()

       import numpy as np
       import matplotlib.pyplot as mat11
       objects = ('40 to 60', '61 to 80', '81 to 100')
       y_pos = np.arange(len(objects))
       types = (3, 19, 48)
       mat11.bar(y_pos, types, align='center',
color='magenta')
       mat11.xticks(y_pos, objects)
       mat11.ylabel('Number Of Games')
       mat11.title('Number Of Games According to Various
review score(out of 100)')
       mat11.show()

   def line():
       label1 = ['Geforce GTX 1050 Ti', 'Geforce GTX 1060',
'Geforce GTX 1070 Ti']
       sizes = [23, 27, 21]
       import matplotlib.pyplot as mat10
       mat10.plot(label1, sizes)
       mat10.title("Games in PCGBM for various Graphics card")
       mat10.xlabel('Graphics card')
       mat10.ylabel('No. Of Games')
       mat10.show()

       label1 = ['i3', 'i5', 'i7']
       sizes = [25, 22, 24]
       import matplotlib.pyplot as mat9
       mat9.plot(label1, sizes)
       mat9.title("Games in PCGBM for various Processors")
       mat9.xlabel('Processors')
       mat9.ylabel('No. Of Games')
       mat9.show()

       label1 = ['4GB', '8GB', '16GB']
       sizes = [24, 19, 28]
       import matplotlib.pyplot as mat8
       mat8.plot(label1, sizes)
       mat8.title("Games in PCGBM for various RAM")
       mat8.xlabel('Ram')
       mat8.ylabel('No. Of Games')
       mat8.show()

       label1 = ['Free', '1 to 20', '$21 to $40', '$41 to
$60', '$61 to $100']
       sizes = [14, 22, 20, 12, 3]
       import matplotlib.pyplot as mat7
       mat7.plot(label1, sizes)
```

```
        mat7.title("Games in PCGBM for various prices($)\n")
        mat7.xlabel('Prices($)')
        mat7.ylabel('No. Of Games')
        mat7.show()

        label1 = ['40 to 60', '61 to 80', '81 to 100']
        sizes = [3, 19, 48]
        import matplotlib.pyplot as mat6
        mat6.plot(label1, sizes)
        mat6.title("Games in PCGBM for various Review Score out
of 100\n")
        mat6.xlabel('Review score')
        mat6.ylabel('No. Of Games')
        mat6.show()

    def scatter():

        import matplotlib.pyplot as mat5
        label1 = ['Geforce GTX 1050 Ti', 'Geforce GTX 1060',
'Geforce GTX 1070 Ti']
        sizes = [23, 27, 21]
        mat5.scatter(label1, sizes, c="blue")
        mat5.show()

        import matplotlib.pyplot as mat4
        label1 = ['i3', 'i5', 'i7']
        sizes = [25, 22, 24]
        mat4.scatter(label1, sizes, c="green")
        mat4.show()

        import matplotlib.pyplot as mat3
        label1 = ['4GB', '8GB', '16GB']
        sizes = [24, 19, 28]
        mat3.scatter(label1, sizes, c="green")
        mat3.show()

        import matplotlib.pyplot as mat2
        label1 = ['Free', '1 to 20', '$21 to $40', '$41 to
$60', '$61 to $100']
        sizes = [14, 22, 20, 12, 3]
        mat2.scatter(label1, sizes, c="green")
        mat2.show()

        import matplotlib.pyplot as mat1
        label1 = ['40 to 60', '61 to 80', '81 to 100']
        sizes = [3, 19, 48]
        mat1.scatter(label1, sizes, c="green")
        mat1.show()

    print('\nSelect the graph you want to see')
    print('1.Pie chart')
    print('2.Bar graph')
    print('3.Line Graph')
    print('4.Scatter plot')
    choice = int(input('Enter choice of graphs : '))
    if choice == 1:
        mypie()
        again10()
    elif choice == 2:
        bar()
        again10()
    elif choice == 3:
        line()
        again10()
    elif choice == 4:
        scatter()
        again10()
    else:
        print("\nWRONG INPUT \nCHOOSE AGAIN")
        graphs()


main()
```