APP_CT_2- Descriptive Answers

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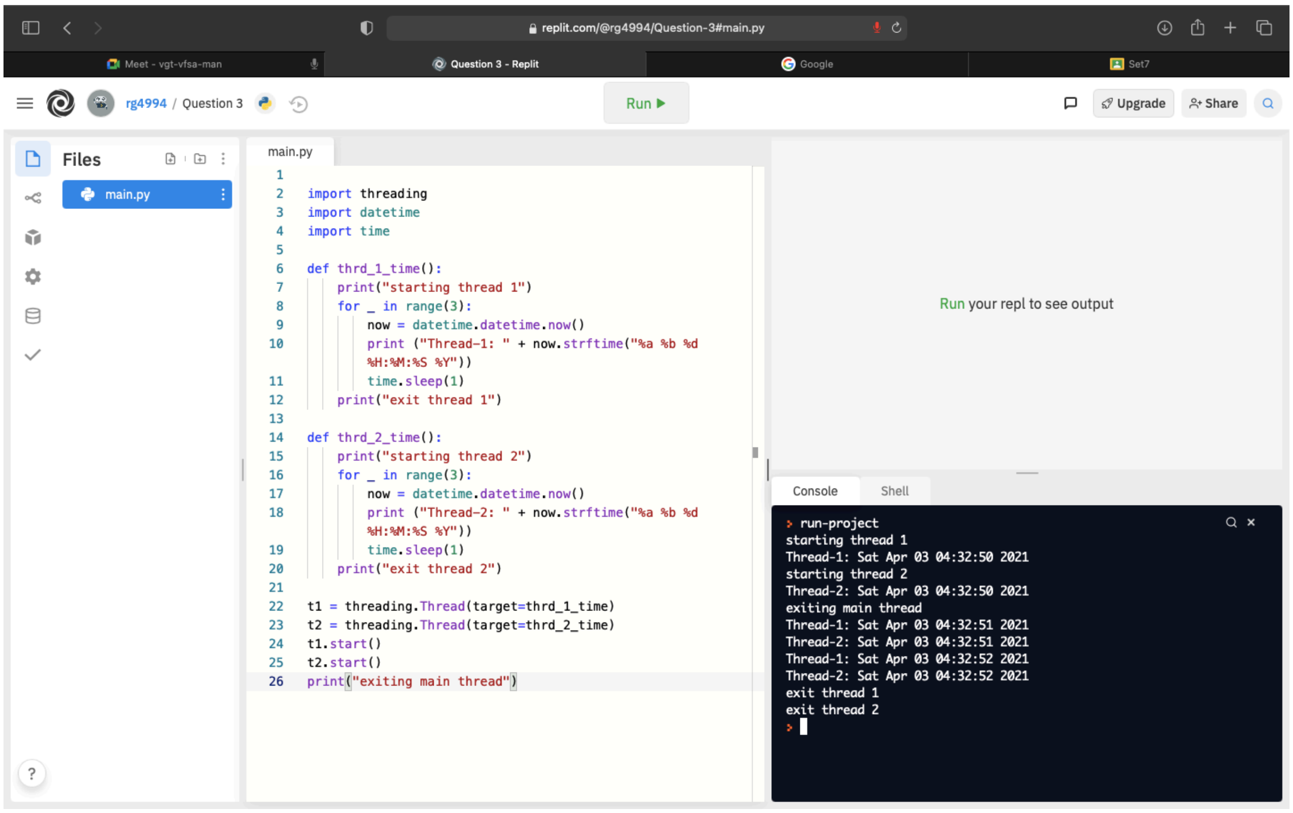
Q5)

```
import threading
import datetime
import time

def thrd_1_time():
    print("starting thread 1")
    for _ in range(3):
        now = datetime.datetime.now()
        print ("Thread-1: " + now.strftime("%a %b %d %H:%M:%S
%Y"))
        time.sleep(1)
    print("exit thread 1")

def thrd_2_time():
    print("starting thread 2")
    for _ in range(3):
        now = datetime.datetime.now()
        print ("Thread-2: " + now.strftime("%a %b %d %H:%M:%S
%Y"))
        time.sleep(1)
    print("exit thread 2")

t1 = threading.Thread(target=thrd_1_time)
t2 = threading.Thread(target=thrd_2_time)
t1.start()
t2.start()
```



```

import threading
import datetime
import time

def thrd_1_time():
    print("starting thread 1")
    for _ in range(3):
        now = datetime.datetime.now()
        print ("Thread-1: " + now.strftime("%a %b %d
        %H:%M:%S %Y"))
        time.sleep(1)
    print("exit thread 1")

def thrd_2_time():
    print("starting thread 2")
    for _ in range(3):
        now = datetime.datetime.now()
        print ("Thread-2: " + now.strftime("%a %b %d
        %H:%M:%S %Y"))
        time.sleep(1)
    print("exit thread 2")

t1 = threading.Thread(target=thrd_1_time)
t2 = threading.Thread(target=thrd_2_time)
t1.start()
t2.start()
print("exiting main thread")
```

```
> run-project
starting thread 1
Thread-1: Sat Apr 03 04:32:50 2021
starting thread 2
Thread-2: Sat Apr 03 04:32:50 2021
exiting main thread
Thread-1: Sat Apr 03 04:32:51 2021
Thread-2: Sat Apr 03 04:32:51 2021
Thread-1: Sat Apr 03 04:32:52 2021
Thread-2: Sat Apr 03 04:32:52 2021
exit thread 1
exit thread 2
>
```

Q4)

```
import  sqlite3
conn  =  sqlite3 . connect ( 'mydatabase.db' )

cursor  =  conn . cursor ()

#create the salesman table

cursor.execute("CREATE TABLE salesman(salesman_id n(5), name char(30), city char(35), commission decimal(7,2));")


# inserting data into the table

cursor . execute ( """

INSERT INTO salesman(salesman_id,'name', 'city',commission)

VALUES(5001,'James Hoog', 'New York', 0.15)

""")

cursor . execute ( """

INSERT INTO salesman(salesman_id,'name', 'city',commission)

VALUES(5002,'Nail Knite', 'Paris', 0.25)

""")

cursor . execute ( """

INSERT INTO salesman(salesman_id,'name', 'city',commission)

VALUES(5003,'Pit Alex', 'London', 0.15)

""")

cursor . execute ( """

INSERT INTO salesman(salesman_id,'name', 'city',commission)

VALUES(5004,'Mc Lyon', 'Paris', 0.35)

""")

conn.commit ()

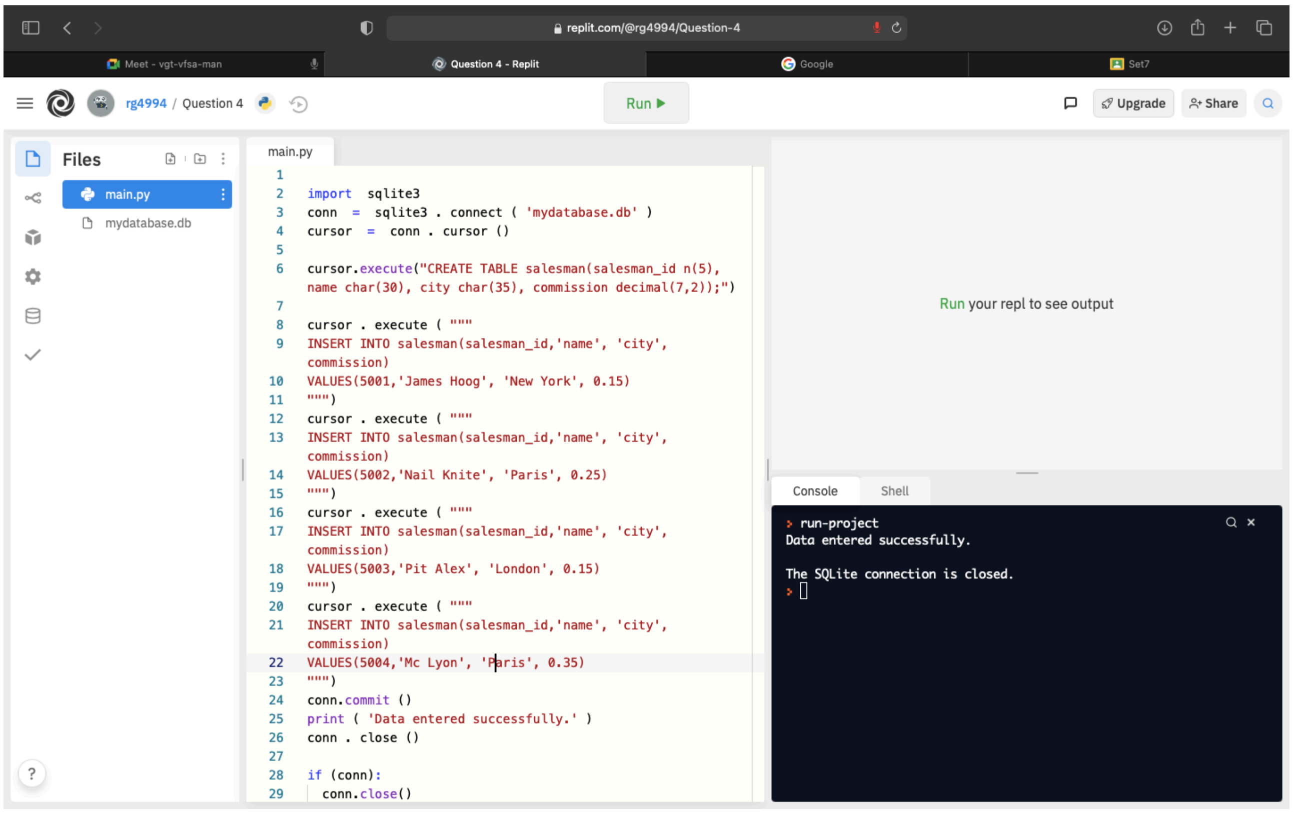
print ( 'Data entered successfully.' )

conn . close ()


if (conn):

  conn.close()

  print("\nThe SQLite connection is closed.")
```



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import  sqlite3
conn  =  sqlite3 . connect ( 'mydatabase.db' )
cursor  =  conn . cursor ()

cursor.execute("CREATE TABLE salesman(salesman_id n(5),
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commission)
VALUES(5003,'Pit Alex', 'London', 0.15)
""")
cursor . execute ( """
INSERT INTO salesman(salesman_id,'name', 'city',
commission)
VALUES(5004,'Mc Lyon', 'Paris', 0.35)
""")
conn.commit ()
print ( 'Data entered successfully.' )
conn . close ()

if (conn):
  conn.close()
```

```
> run-project
Data entered successfully.

The SQLite connection is closed.
> 
```

Q6)
import socket # for socket

import sys

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)

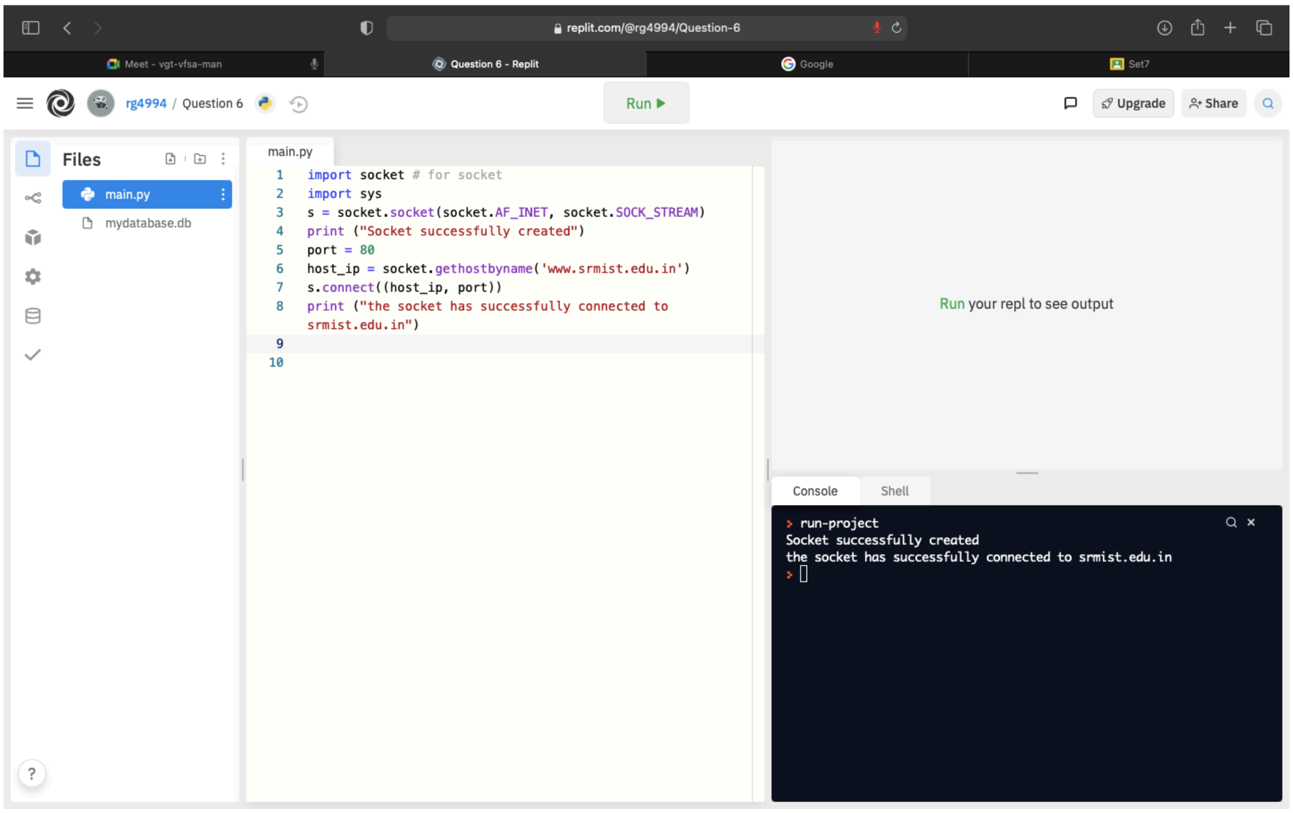
print ("Socket successfully created")

port = 80

host_ip = socket.gethostbyname('www.srmist.edu.in')

s.connect((host_ip, port))

print ("the socket has successfully connected to srmist.edu.in")



```python
import socket # for socket
import sys
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
print ("Socket successfully created")
port = 80
host_ip = socket.gethostbyname('www.srmist.edu.in')
s.connect((host_ip, port))
print ("the socket has successfully connected to srmist.edu.in")
```

```
> run-project
Socket successfully created
the socket has successfully connected to srmist.edu.in
>
```

ADVANCED PROGRAMMING PRACTICE - CT-2

Name: Rahul Goel

Reg No: RA1911030010094

Batch: CSE - 02.

② (i) 22

(ii) c. execute ('INSERT INTO Customer (Datestamp, Max weight, Reps) VALUES (?, ?, ?)', (date, weight.get(), reps.get()))

(iii) L1 = Label (window, text = "Compound Lift", font = ("arial", 18)). place (x=10, y=100) compound = ('Bench', 'Squat', 'Deadlift', 'OVH') compd = option Menu (window, comp, *compound) compd. place (x=220, y=105)

L2 = Label (window, text = "Day (dd)", font= ("arial", 18)). place (x=10, y=150) dayT= Entry(window, textvariable = day) dayTplace (x=220, y=155)

(iv) Place geometry manager is used on the above form.

```
button_4 = Button (window, text = "Update")
button_4.place (x=100, y=400).
```

⑧
```
Import threading
schedule-1 = get value ()      # get some initial value
lock = threadPng.Lock ()
def read ():
    lock. acquire ()
    print ("Passengers can read schedule-1")
    time. sleep (10)
    lock. release ()

def write ():
    global schedule-1
    lock. acquire()
    print (" Schedule-1 is now modifying")
    schedule -1 = input ("enter value for schedule-1")
    time. sleep (10)
    lock. release ()
    print ("schedule-1 updated")
scheduler = thread = threading. Thread (target = write)
Passenger = thread = threading. Thread (large = read)
scheduler. thread. start()
passenger. thread . start()
scheduler - thread. join()
passenger - thread. join()
```

Q1)

```
import socket

import sys

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
port = 60
s.bind(('0.0.0.0', port))
print ('Socket binded to port 60')
s.listen(3)
print ('socket is listening')

while True:
   c, addr = s.accept()
   print ('Got connection from ', addr)
   print (c.recv(1024))
   c.close()
```

Q1 client:

```
import socket

s = socket.socket()
port = 60
s.connect(('localhost', port))
z = """Hi server, I'm ready to transfer my data
This is socket application"""
s.sendall(z.encode())
s.close()
```

Q7)

```
mport socket programming library

import socket



# import thread module

from _thread import *

import threading



print_lock = threading.Lock()



# thread function
```

```
def threaded(c):
    while True:

        # data received from client
        data = c.recv(1024)
        if not data:
            print('Bye')

            # lock released on exit
            print_lock.release()
            break

        # reverse the given string from client
        data = data[::-1]

        # send back reversed string to client
        c.send(data)

    # connection closed
    c.close()


def Main():
    host = ""

    # reverse a port on your computer
    # in our case it is 12345 but it
    # can be anything
    port = 12345
    s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    s.bind((host, port))
    print("socket binded to port", port)

    # put the socket into listening mode
    s.listen(5)
    print("socket is listening")

    # a forever loop until client wants to exit
    while True:

        # establish connection with client
        c, addr = s.accept()

        # lock acquired by client
        print_lock.acquire()
        print('Connected to :', addr[0], ':', addr[1])

        # Start a new thread and return its identifier
        start_new_thread(threaded, (c,))
    s.close()


if name == 'main':
    Main()
```

Q3)

```
# importing whole module
from tkinter import *
from tkinter.ttk import *

# importing strftime function to
# retrieve system's time
from time import strftime

# creating tkinter window
root = Tk()
root.title('Clock')

# This function is used to
# display time on the label
def time():
    string = strftime('%H:%M:%S %p')
    lbl.config(text = string)
    lbl.after(1000, time)

# Styling the label widget so that clock
# will look more attractive
lbl = Label(root, font = ('calibri', 40, 'bold')
,foreground = 'purple')

# Placing clock at the centre
# of the tkinter window
lbl.pack(anchor = 'center')
time()

mainloop()
```