<table>
<tr><th>S. No.</th><th>Practical</th><th>Date</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Write a program to define: -
a). Getdata(): - to input five subject marks (out of 100).
b). Calculate(): - to calculate percentage and Grade as per the following criteria:-
<table>
<tr><th>Percentage</th><th>Grade</th></tr>
<tr><td>>90%</td><td>A1</td></tr>
<tr><td>75-90</td><td>A</td></tr>
<tr><td>60-75</td><td>B</td></tr>
<tr><td>45-60</td><td>C</td></tr>
<tr><td>33-45</td><td>D</td></tr>
<tr><td><33</td><td>E</td></tr>
</table>
c). Display():- to display percentage and grade on screen.</td><td></td><td></td></tr>
<tr><td>2.</td><td>Write a python program to:
i. Create Generate() integer number randomly between 1 to 10 and return generated number.
ii. Define function GetNum() to get integer number and compare with returned number by Generate() function, if number matched then show “You are Won” otherwise “You are Looser”.</td><td></td><td></td></tr>
<tr><td>3.</td><td>Amritya Seth is a programmer, who has recently been given a task to write a python code to perform the following binary file operations with the help of two user defined functions/modules:
a. AddStudents() to create a binary file called STUDENT.DAT containing student information – roll number, name and marks (out of 100) of each student.
b. GetStudents() to display the name and percentage of those students who have a percentage greater than 75. In case there is no student having percentage > 75 the function displays an appropriate message. The function should also display the average percent.</td><td></td><td></td></tr>
<tr><td>4.</td><td>Write a method/ function SHOW_TODO() in python to read contents from a text file ABC.TXT and display those lines which have occurrence of the word ‘‘TO’’ or ‘‘DO’’.</td><td></td><td></td></tr>
<tr><td>5.</td><td>Write a method/function COUNTLINES_ET() in python to read lines from a text file REPORT.TXT, and COUNT those lines which are starting either with ‘E’ or starting with ‘T’ and display the Total count separately.</td><td></td><td></td></tr>
<tr><td>6.</td><td>A binary file named “TEST.dat” has some recor`ds of the structure [TestId, Subject, MaxMarks, ScoredMarks].
Write a function in Python named DisplayAvgMarks(Sub) that will accept a subject as an argument and read the contents of TEST.dat. The function will calculate & display the Average of the ScoredMarks of the passed Subject on
screen.</td><td></td><td></td></tr>
<tr><td>7.</td><td>i. Write a user defined function CreateFile() to input data for a record and add to Book.dat file.
ii. Write a function CountRec(Author) in Python which accepts the Author name as parameter and count and return number of books written by the given Author are stored in the binary file “Book.dat”</td><td></td><td></td></tr>
<tr><td>8.</td><td>Write a Python-MySQL Connectivity code to perform the following operation with School Database Employee Table.
Operations:
1. Add New Employee Record
2. Display Existing Employee Details in Tabulation form
3. Update employee information with employee id
4. Remove existing by Employee id and show appropriate message in case record not exist.
5. Search Employee record by Employee Name</td><td></td><td></td></tr>
<tr><td>9.</td><td>Write a Python-MySQL Connectivity code to perform the following operation with “Bill” Database Inventory Table.</td><td></td><td></td></tr>
</table>

Operations:

1. Make Entry of New Goods [ItemNo, Iname, Price, Quantity, Make]
2. Print Status of Stock
3. Modify Regular Selling Item Stock.
4. Search Item with Name of Item.

10. Write PushOn(Book) and Pop(Book) methods/functions in Python to add a new Book and delete a Book from a List of Book titles, considering them to act as push and pop operations of the Stack data structure.

11. Write a function in python, pushme (stock, item) and popme(stock) to add a new item and delete an item from the stock, considering them to act as push and pop operations of the stack.

12. Two list Lname and Lage contains name of person and age of person respectively. A list named Lnameage is empty. Write functions as details given below
(i) Push_na() :- it will push the tuple containing pair of name and age from Lname and Lage whose age is above 50
(ii) Pop_na() :- it will remove the last pair of name and age and also print name and age of removed person. It should also print "underflow" if there is nothing to remove

13. Write a program to create a function AddCustomer(Customer) in Python to add a new Customer information into the stack (list) CStack and display the information.

14. Write a program to create a function DeleteCustomer() to delete a Customer information from a list of CStack. The function delete the name of customer from the stack.

15. Write a Program in Python that defines and calls the following user defined functions:
(i) ADD() – To accept and add data of an employee to a CSV file 'record.csv'. Each record consists of a list with field elements as empid, name and mobile to store employee id, employee name and employee salary respectively.
(ii) COUNTR() – To count the number of records present in the CSV file named 'record.csv'.

16. Table: EMPLOYEES

Empid	**Firstname**	**Lastname**	**Address**	**City**
010	Ravi	Kumar	Raj nagar	GZB
105	Harry	Waltor	Gandhi nagar	GZB
152	Sam	Tones	33 Elm St.	Paris
215	Sarah	Ackerman	440 U.S. 110	Upton
244	Manila	Sengupta	24 Friends street	New Delhi
300	Robert	Samuel	9 Fifth Cross	Washington
335	Ritu	Tondon	Shastri Nagar	GZB
400	Rachel	Lee	121 Harrison St.	New York
441	Peter	Thompson	11 Red Road	Paris

Table: EMPSALARY

Empid	**Salary**	**Benefits**	**Designation**	
010	75000	15000	Manager	
105	65000	15000	Manager	
152	80000	25000	Director	
215	75000	12500	Manager	
400	32000	7500	Salesman	
441	28000	7500	salesman	
501	18000	6500	Clerk	

Give the **Output** of following SQL commands:
(i) Select Employee.firstname, empsalary, salary from employees, empsalary where designation = 'Salesman' and Employees.empid=Empsalary.empid;
(ii) Select count(distinct designation) from empsalary;
(iii) Select designation, sum(salary) from empsalary group by designation having count(*) >2;
(iv) Select sum(benefits) from empsalary where designation ='Clerk';

	v) Write SQL Query for Equi join and Non-equi join.		
17.	Write a query to create the following table with Show structure of Table and Number of Tables in Current working Database. Table – Customer		

Name of Field	Datatype	Size	Constraints
Cno	Integer	5	Primary Key
Cname	Varchar	30	Not Null
Gender	Char	1	
DOB	Date	-	>= "2003-01-01"
Amountpaid	Float	10,2	Default "Free"
Remarks	Varchar	100	

18. A Stationery shop MyBag has decided to maintain its inventory of items using MySQL. As a database administer, Rahul has created the database and table as per the following :
Name of the database -MyBag
Name of the table - ITEMS
The attributes of ITEMS are as follows: ItemNo – Numeric, ItemName – Character of size 20 ,Scode –Numeric,Quantity –Numeric

Table: ITEMS

ItemNo	ItemName	Scode	Quantity	
2005	Sharpener Classic	23	60	
2002	Get Pen Premium	21	150	
2006	Get Pen Classic	21	250	
2001	Eraser Small	22	220	
2004	Eraser Big	22	110	

19. A music store MySports is considering to maintain their inventory using SQL to store the data. The detail is as follow:
- Name of the database – MySports
- Name of the table – Sports

The attributes of SPORTS are as follows:
- ✓ SCode – character
- ✓ SportName – character of size 20
- ✓ Noofplayers – numeric
- ✓ coachname – character of size 20

Table: SPORTS

20. Table: SPORTS

SCode	SportName	No. of players	Coachname	
S001	Cricket	21	Rahul Dravid	
S002	Football	25	Roshan Lal	
S003	Hockey	40	Sardar Singh	
S004	Cricket	19	Chetan Sharma	
S005	Archery	12	Limbaram	
S006	Shooting	17	Deepika Kumari	

a) Create Table "SPORTS"
b) Display details about structure of table.
c) Insert the following data into the attributes SCode, SportName and No. of players respectively in the given table SPORTS.

	SCode = S007, SportName = “Kabbadi” and Noofplayers = 15 d) To delete Column “ SCode” and Another Column “SID” with appropriate column type and constraints.		

********** Best of Luck **********