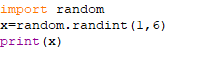
COMPUTER JOURNAL

PONNURI ANIRUDDHA

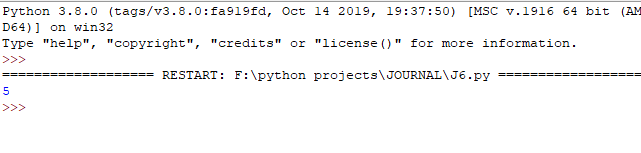
CLASS: XII-S1

|  |  |  |
| --- | --- | --- |
| SR NO. | TOPIC | SIGNATURE |
| 1 | Write a random number generator that generates random numbers between 1 and 6 (simulates a dice). |  |
| 2 | Write a function that receives two string arguments and checks whether they are same length strings. |  |
| 3 | Write a program that generates a series using a function which takes first  and last values of the series and then generates 4 terms that are  equidistant |  |
| 4 | Write a function that takes two numbers and returns the number that has  minimum one’s digit. |  |
| 5 | Write a Python program to implement a stack and queue using a list data structure |  |
| 6 | Read a text file line by line and display each word separated by a #. |  |
| 7 | Read a text file and display the number of vowels/ consonants/ uppercase/  lowercase characters in the file |  |
| 8 | Remove all the lines that contain the character `a' in a file and write it to  another file. |  |
| 9 | Take a sample of ten phishing e-mails (or any text file) and find most  commonly occurring word(s). |  |
| 10 | Create a binary file with name and roll number. Search for a given roll  number and display the name, if not found display appropriate message. |  |
| 11 | Create a binary file with roll number, name and marks. Input a roll number  and update the marks. |  |
| 12 | Write a Python program to write a nested Python list to a CSV file in one go. After writing the CSV file, read the CSV file and display the content |  |
| 13 | Write a function that reads a CSV file and creates another CSV file with the  same content, but with a different delimiter |  |
| 14 | Create a program that inserts rows in employee table of MySQL database EMP |  |
| 15 | Write a python program that displays all records of employee table. |  |
| 16 | Write a program to print all data of employees designation wise |  |
| 17 | Write a python program to increase salary of employees in accounts department by 10 percent |  |
| 18 | Write a program to delete the record of employee no. entered by the user |  |
| 19 | Write a program to display all details of all employees order by designation |  |
| 20 | Write a program to print all data of employee whose designation and salary entered by user |  |
| 21 | MySQL Query-based Questions |  |

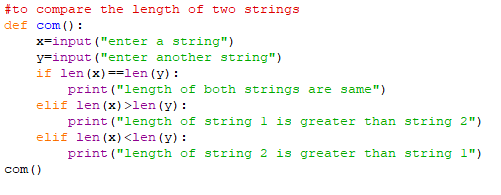
A RAMDOM NUMBER GENERATOR THAT GENERATES RANDOM NUMBERS BETWEEN 1 AND 6.



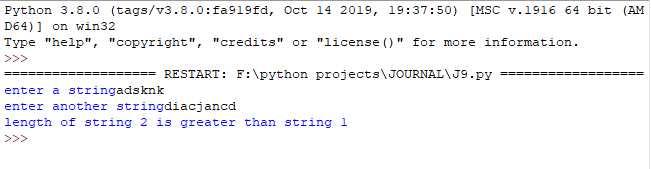
OUTPUT:-



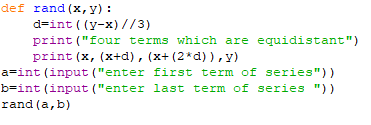
WRITE A FUNCTION THAT RECEIVES TWO STRING ARGUMENTS AND CHECKS WHETHER THEY ARE SAME LENGTH STRINGS.



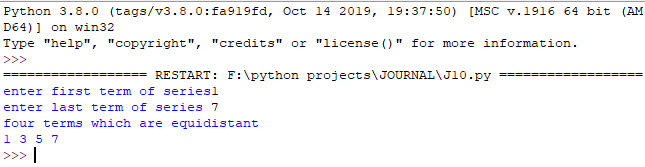
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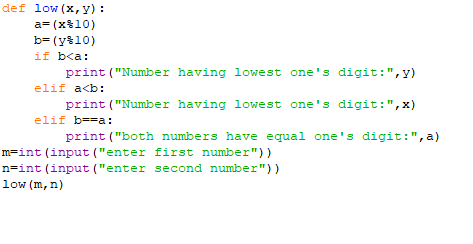
WRITE A PROGRAM THAT GENERATES A SERIES USING A FUNCTION WHICH TAKES FIRST AND LAST VALUES OF SERIES AND THEN GENRATES 4 EQUIDISTANT TERMS



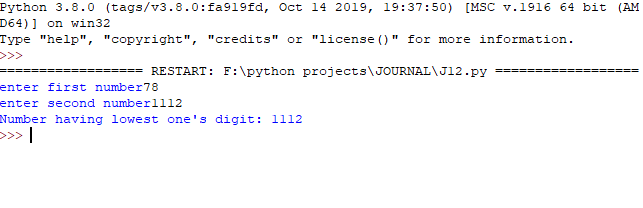
OUTPUT:-



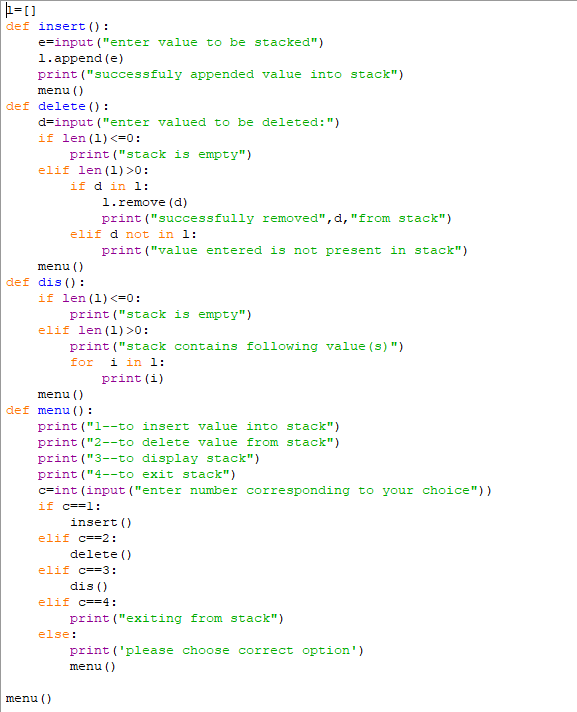
WRITE A FUNCTION THAT TAKES TWO NUMBERS AND RETURNS NUMBER THAT HAS MINIMUM ONE’S DIGIT



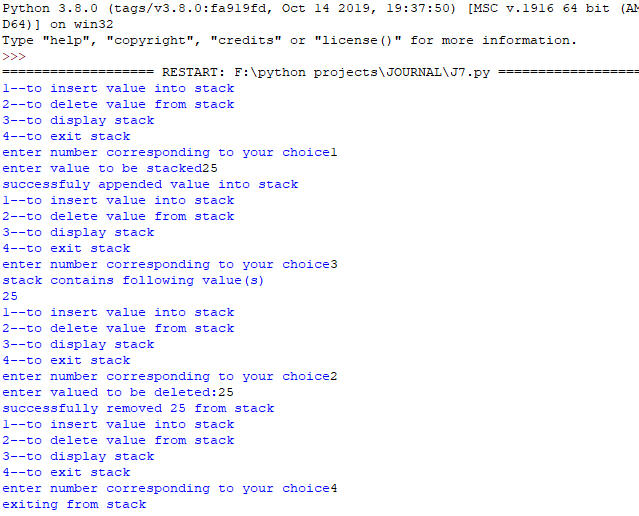
OUTPUT:-



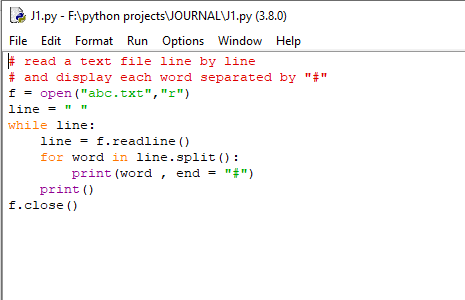
WRITE A PROGRAM TO IMPLEMENT STACK USING A LIST DATA STRUCTURE



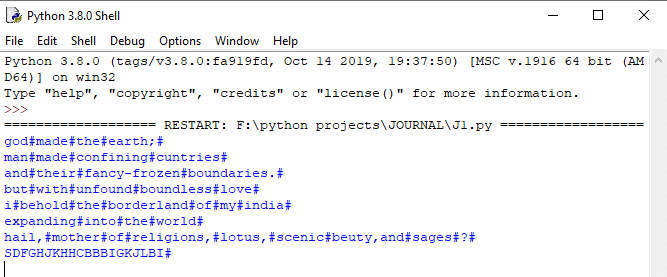
OUTPUT:-



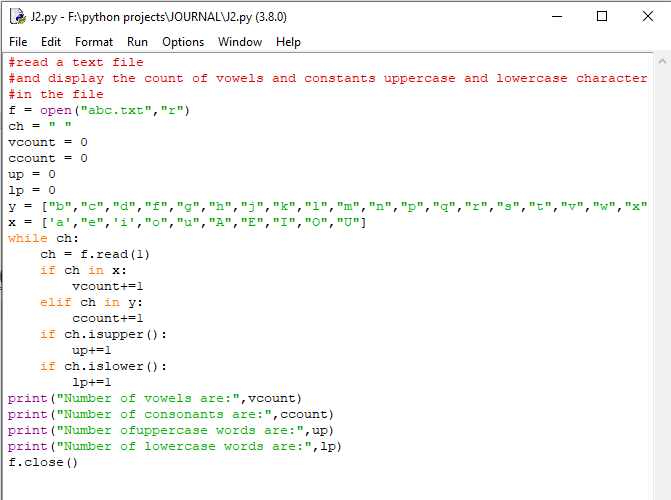
READ A TEXT FILE LINE BY LINE AND DISPLAY EACH WORD SEPARATED BY A “#”



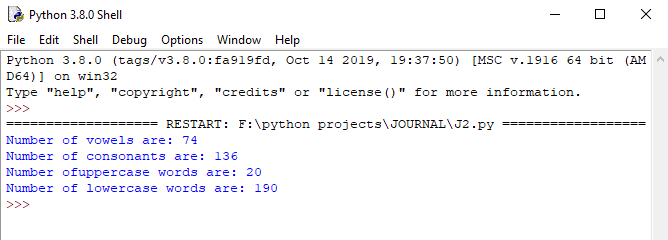
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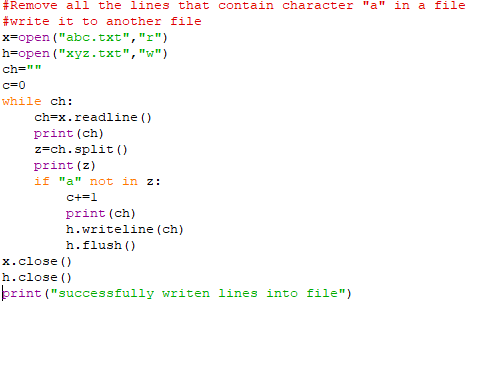
READ A TEXT FILE AND DISPLAY THE NUMBER OF VOWELS, CONSONANTS, UPPERCASE, LOWERCASE CHARACTERS IN THE FILE



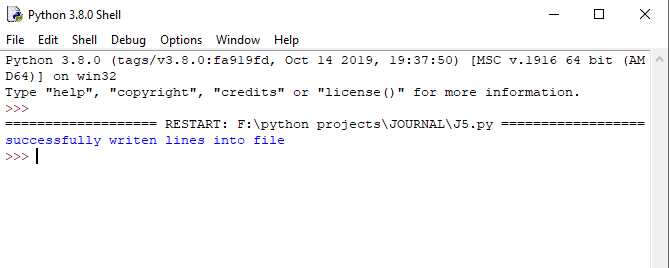
OUTPUT:-



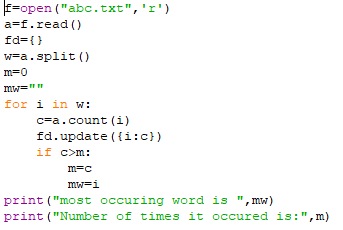
REMOVE ALL THE LINES THAT CONTAIN THE CHARACTER ‘a’ IN A FILE AND WRITE IT TO ANOTHER FILE



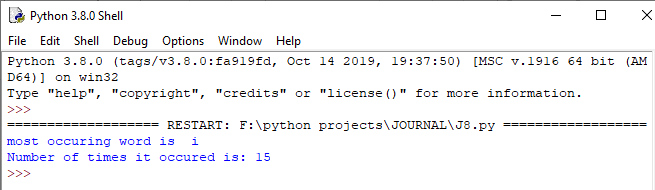
OUTPUT:-



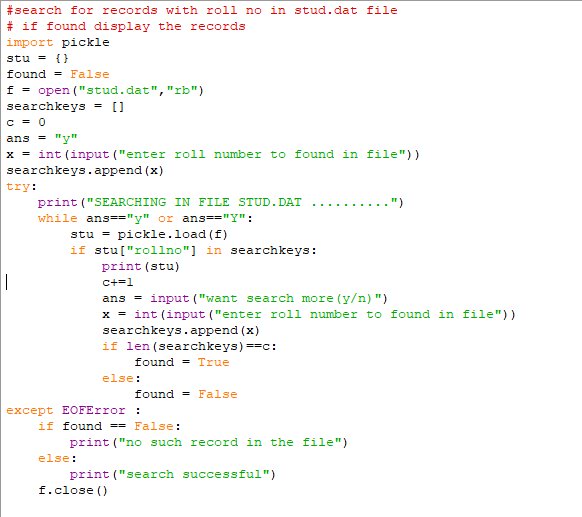
TAKE A SAMPLE OF TEN PHISHING E-MAILS ( OR ANY TEXT FILE ) AND FIND THE MOST COMMONLY OCCURING WORD(S).



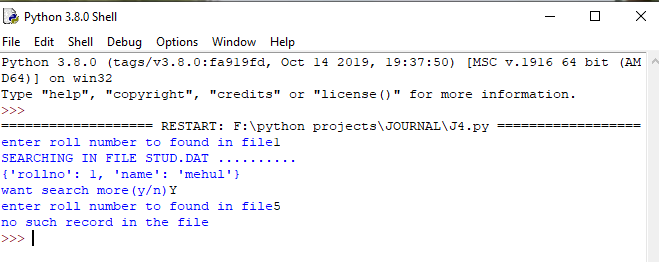
OUTPUT:-



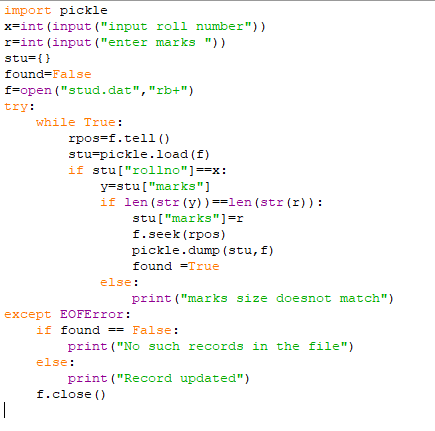
CREATE A BINARY FILE WITH NAME AND ROLL NUMBER, SEARCH FOR A GIVEN NAME ROLL NUMBER AND DISPLAY THE NAME .IF NOT FOUND DISPLAY APPROPRIATE MESSAGE



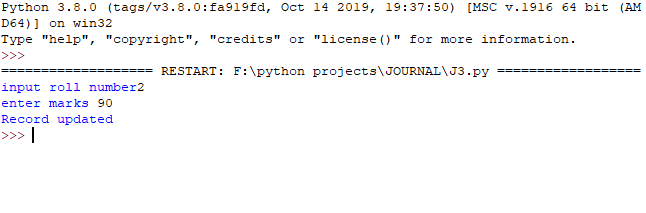
OUTPUT:-



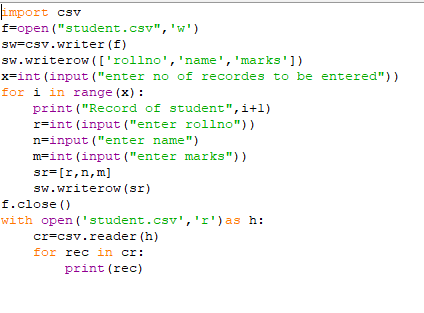
CREATE A BINARY FILE WITH ROLL NUMBER, NAME,MARKS.INPUT A ROLL NUMBER AND UPDATE THE MARKS



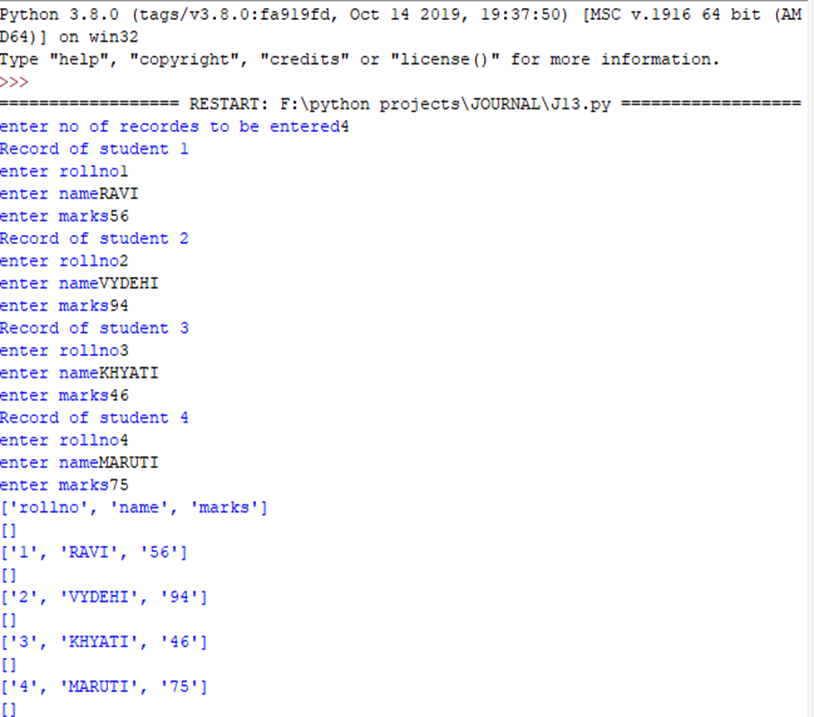
OUTPUT:-



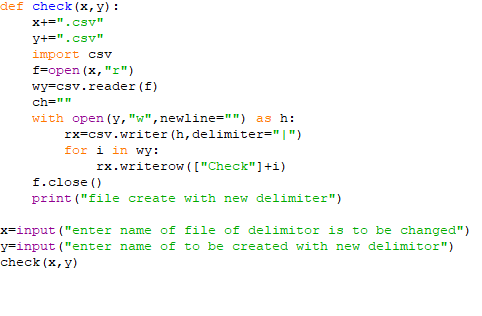
WRITE A PYTHON PROGRAM TO WRITE NESTED LIST TO CSV FILE. AFTER WRITING THE CSV FILE , READ FILE AND DISPLAY THE CONTENT



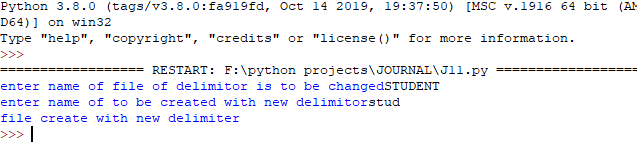
OUTPUT: -



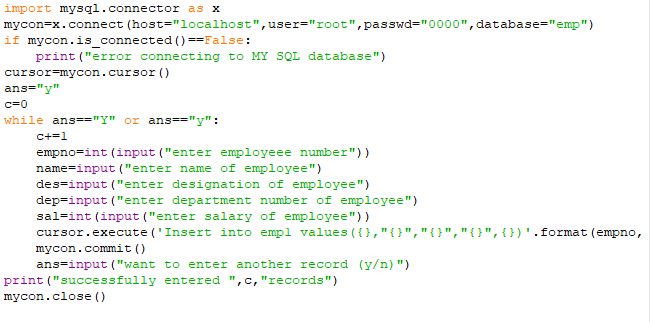
WRITE A FUNCTION THAT READS A CSV FILE AND CREATE ANOTHER CSV FILE WITH SAME CONTENT BUT WITH A DIFFERENT DELIMITER

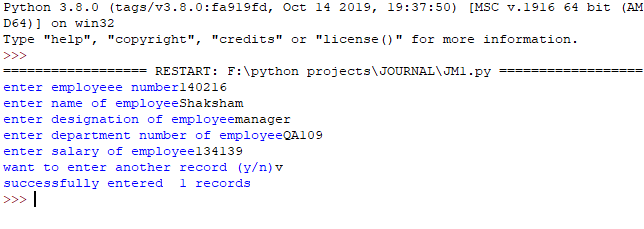


OUTPUT:-

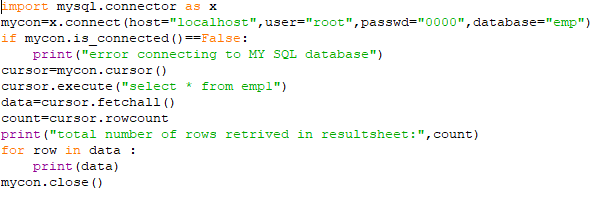


QUESTION BASED ON MY SQL CONNECTIVITY

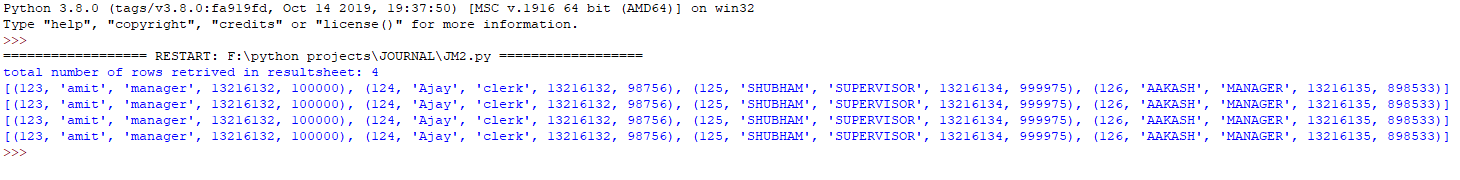
CREATE A PROGRAM THAT INSERTS ROWS IN TABLE EMPLOYEE OF MY SQL DATABASE EMP.

OUTPUT:-

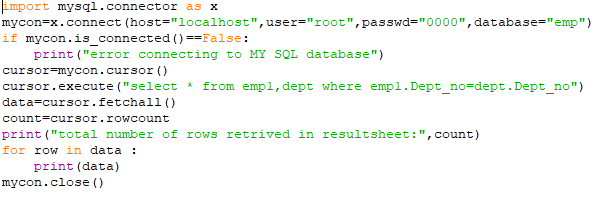
Write a python program that displays all records of employee table.



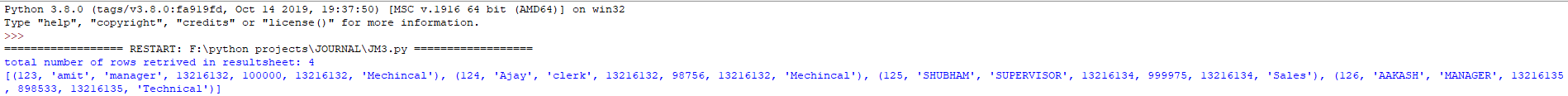
OUTPUT: --



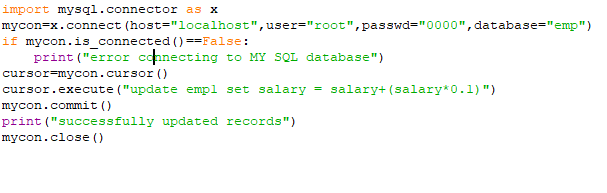
Write a program to print all data of employees designation wise



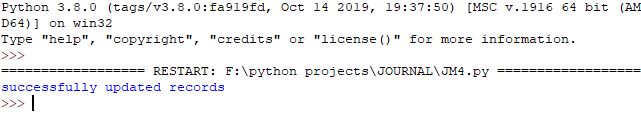
OUTPUT: --



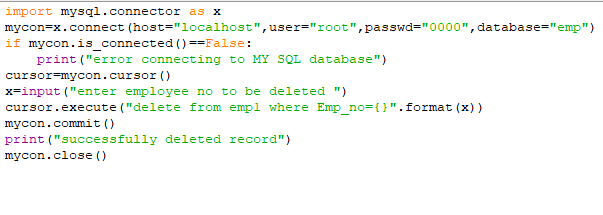
Write a python program to increase salary of employees in accounts department by 10 percent



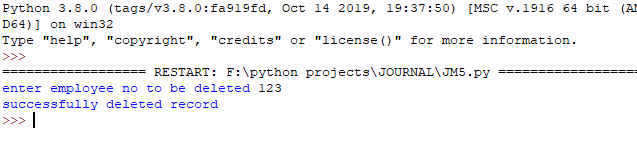
OUTPUT: --



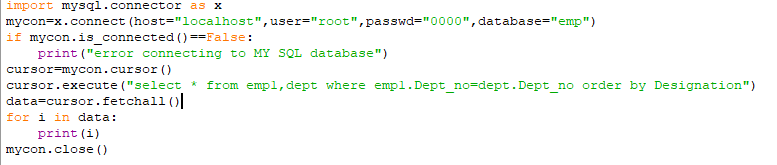
Write a program to delete the record of employee no. entered by the user



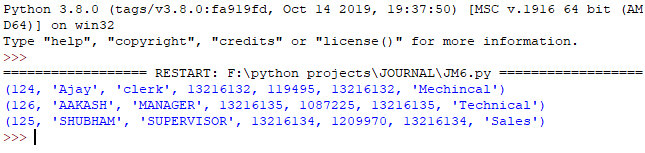
OUTPUT: --



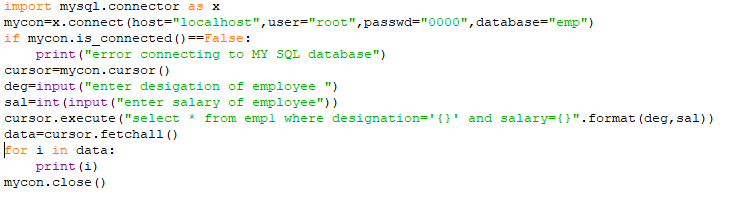
Write a program to display all details of all employees order by designation



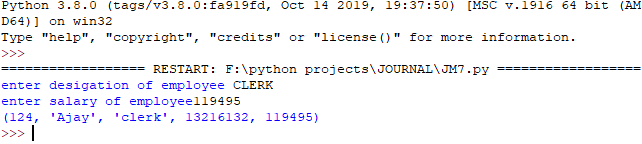
OUTPUT: --



Write a program to print all data of employee whose designation and salary entered by user



OUTPUT: --



QUESTION BASED ON MYSQL

Q: Create table customer as per following

Table Instance Chart

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Column name | Cust\_ID | Cust\_Name | Cust\_Address1 | Cust\_Address2 | Pincode | Cust\_phone |
| Data Type | Number | Varchar | Varchar | Varchar | Number | Varchar |
| Length | 7 | 30 | 20 | 30 | 6 | 10 |

Answer:--

“create table customer(Cust\_ID int (7), Cust\_Name varchar(30), Cust\_Address1 varchar(20), Cust\_Address2 varchar(30) , Pincode int(6), Cust\_phone varchar(10)”

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No. | Name | Stipend | Stream | AvgMark | Grade | Class |
| 1 | KARAN | 400.00 | MEDICAL | 78.5 | B | 12B |
| 2 | DIVAKAR | 450.00 | COMMERCE | 89.5 | A | 11C |
| 3 | DIVYA | 300.00 | COMMERCE | 68.6 | C | 12C |
| 4 | ARUN | 350.00 | HUMANITES | 73.1 | B | 12C |
| 5 | SABINA | 500.00 | NONMEDICAL | 90.6 | A | 11A |
| 6 | JOHN | 400.00 | MEDICAL | 75.4 | B | 12B |
| 7 | ROBERT | 250.00 | HUMANTIES | 64.4 | C | 11A |
| 8 | RUBINA | 450.00 | NONMEDICAL | 88.5 | A | 12A |
| 9 | VIKAS | 500.00 | NONMEDICAL | 92.0 | A | 12A |
| 10 | MOHAN | 300.00 | COMMERCE | 67.5 | C | 12C |

Q:

1. Select all the Non-Medical students from STUDENT1.
2. List the names of those students who are in class 12 sorted by Stipend
3. List all the students sorted by Avgmarks
4. Display a report, listing Name, Stipend, Stream and Amount of stipend received in a year assuming that the stipend is paid every month

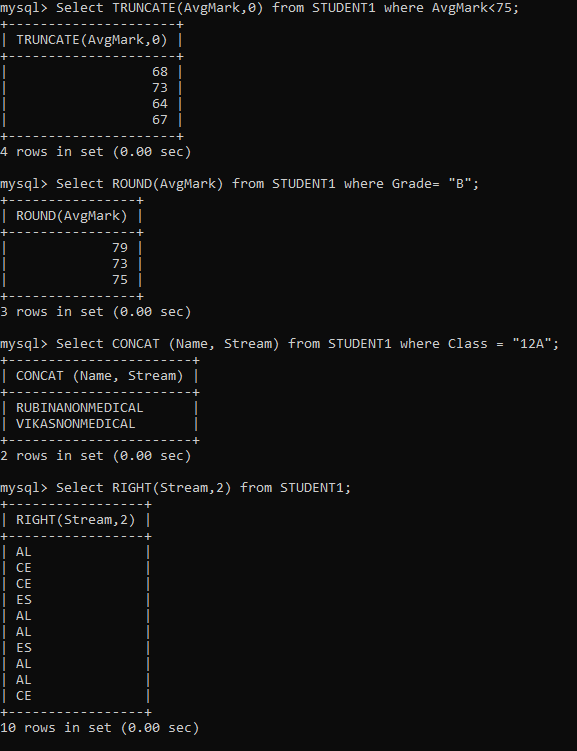
Answers: -

1. ” select \* from STUDENT1 where ‘Stream’ = ‘Nonmedical’ ;”
2. “select ‘Name’ from STUDENT1 where ‘Class’ like ‘12%’ , order by (‘Stipend’);”
3. “ select \* from STUDENT1 order by

d)“ select ‘Name’, ‘Stream’, ‘Stipend’ \* 12 as ‘Amount’ from STUDENT1 ;

Q: Give the output of following SQL statements

1. Select TRUNCATE(AvgMark,0) from STUDENT1 where AvgMark<75;
2. Select ROUND(AvgMark) from STUDENT1 where Grade= “B”;
3. Select CONCAT (Name, Stream) from STUDENT1 where Class = “12A”;
4. Select RIGHT(Stream,2) from STUDENT1;

ANSWER:

Q:

Table: Personal

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EmpNo | Name | Dobirth | Native-place | Hobby |
| 123 | Amit | 23-jan-1965 | Delhi | Music |
| 127 | Manoj | 12-dec-1976 | Mumbai | Writing |
| 124 | Abhai | 11-aug-1975 | Allahabad | Music |
| 125 | Vinod | 04-apr-1977 | Delhi | Sports |
| 128 | Abhay | 10-mar-1974 | Mumbai | Gardening |
| 129 | Ramesh | 28-oct-1981 | Pune | Sports |

Table: Job

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SNO | Area | App-date | Salary | Retd\_date | dept |
| 123 | Agra | 25-jan-2006 | 5000 | 25-jan-2026 | Marketing |
| 127 | Mathura | 22-dec-2006 | 6000 | 22-dec | Finance |
| 124 | Agra | 19-aug-2007 | 5500 | 19-aug-2027 | Marketing |
| 125 | Delhi | 14-apr-2004 | 8500 | 14-apr-2018 | Sales |
| 128 | Pune | 13-mar-2008 | 7500 | 13-mar-2028 | Sales |

Create following table such that Empno and Sno are not null and unique, date of birth is after ’12-jan-1960’, name is never blank, Area and Native place is valid, hobby, dept is not empty, salary is between 4000 and 10000.

**Answer:**

Create table Personal ( Empno integer(3) Primary Key, Name varchar(10) NOT NULL, Dobirth Date, Native-place varchar(10), Hobby varchar(10) NOT NULL, CHECK (Dobirth>'1960-01-12'), check (Native-place in ('Delhi','Mumbai','Allahabad','Pune')));

Create table job(Sno integer(3) NOT NULL UNIQUE, Area varchar(10), App\_date Date, Salary integer(4), Retd\_date date, Dept varchar(10) Not Null, Check(Area in ('Agra','Mathura','Delhi','Pune')), CHECK(Salary between 4000 and 10000));

**Q:**

a) Show empno, name and salary of those who have Sports as hobby.

b) Show name of the eldest employee.

c) Show youngest employees from each Native place.

d) Show Sno, Name, Hobby and salary in descending order of salary

e) Show the hobbies of those whose name is ‘Abhay’

f) Show the appointment date and native place of those whose name starts with ‘A’ or ends in ‘d’

g) Show the salary of those who shall retire after 20-jan-2006

h) Show additional burden on the company in case salary of employees having hobby as sports, is increased by 10%

i) Show the hobby of which there are 2 or more employees

j) Increase salary of the employees by 5% of their present salary with hobby as music

k) Add a new tuple in the table Personal essentially with hobby as Music

l) Insert a new column email in job table

m) Create a table with values of columns empno, name and hobby

n) Remove the table personal

**Answer:**

a) select empno, name, salary from personal, job where personal.empno=job.sno and hobby='sports';

b) select name, min(dobirth) from personal;

c) select name, max(dobirth), Nativeplace from personal group by Nativeplace;

d) select sno,name,hobby,salary from personal,job where personal.empno=job.sno order by salary desc;

e) select hobby from personal where name='Abhay';

f) select Name,Native-place, App\_date from personal,job where personal.empno=job.sno and (name like 'a%' or name like '%d');

g) select name,salary from personal,job where empno=sno and retd\_date>'2006-01-20';

h) select name, salary\*0.1 as 'additional\_burden' from personal, job where empno=sno and hobby='sports';

i) select hobby from personal group by hobby having count(\*)>=2;

j) update personal,job set salary=salary\*1.05 where empno=sno and hobby='Music';

k) insert into personal values(126, 'Sanjay', '1977-10-12', 'Allahabad', 'Music');

l) insert into personal values(126, 'Sanjay', '1977-10-12', 'Allahabad', 'Music');

m) Create table sample (Select empno, name, hobby from personal);

n) drop table personal;

Q:

a) Select distinct hobby from personal;

b) select avg(salary) from personal, job where personal.empno=job.sno and area in ('Agra','Delhi');

c) Select count(distinct Nativeplace) from personal;

d) Select name, max(salary) from personal, job where Personal.empno=Job.Sno

