**International Indian School Jeddah**

**XII Computer Science**

**Practical Program file**

1. Write a program using user defined function to find factorial of a number.
2. Write a program using user defined function to accept two numbers as parameters, if num1 is less than num2 swap them and return the values otherwise return the numbers as is.
3. Write a program to generate a random number between 1 and 6 (simulates a dice).
4. Write a user defined function EvenSum(numbers) to add those values from the list of NUMBERS which are at even positions.
5. Write a program to read a text file line by line and display each word separated by '#'.
6. Write a program to read a text file and display the number of vowels, consonants, uppercase and lowercase in the file.
7. Write a program to remove all the lines that contains the character 'a' in a file and write it to another textfile ‘OTHER.TXT’.
8. Write a method in python to read data from a text file INDIA.TXT, to count and display the occurrence of word ‘INDIA’.
9. Write a program to input roll\_no, name, marks & grade from the user and write it to a binary file Student.dat. The program must display the names of all the students who receive grade ‘A’.
10. Write a menu driven program to read employee data (**EmpId,EmpName,EmpSal**) and write it into a binary file emp.dat. Based on the user’s choice the program must search (), update (), delete () or read () more data into the file.
11. Write a program to search and display all those records of the students whose marks are 50 and above in a binary file Student.dat.
12. Write a program to generate a csv file by reading rollno, name and marks from user. The program must display the name when rollno is entered. If not found, displays appropriate message.
13. Create a CSV file by entering user-id and password, read and search the password for given userid.
14. Write a program to read the dictionary **dict1= {“Dev”:45,” Ravi”:56,” tej”:78}**

Consisting of name and marks of students. Include a function to push name of those students into the stack where marks are greater than 75. Display the contents of the stack.

1. Sami has a list **L1** containing 10 integers you need to help him create a program with separate functions to push () those elements from list L1 which are at even positions and pop() to empty the stack and print the contents.

**Database management MySQL commands:**

1. Write queries for the following questions for the given table.

A table with numbers and text

Description automatically generated

1. To create a new database: ‘Students’.
2. To open the database ‘Students’.
3. To create the above table: Info
4. To insert all the rows of the above table.
5. To display names of those male students whose data of admission is after 1996 April.
6. To list all departments from Info table.
7. To display the names of the students whose name starts with ‘A’ and has 5 letters.
8. To display the details of those students whose names have second alphabet as ‘n’.
9. To delete the details where roll no is 8.
10. To change the fees of the student to 170 where roll number is 1, if the existing fees is less than 130.
11. To add a new column ‘Area’ of type varchar in table Info.
12. To delete ‘Area’ column from Info table.
13. To delete the above table from the database.
14. Write queries for the following questions for the given table.

A table with numbers and text

Description automatically generated

1. To create the above two tables.
2. To display the unit price of all the products whose DCODE is 102.
3. To display details of all the products in the stock table in descending order of stock date.
4. To display maximum unit price of products for each dealer individually as per DCODE from the stock table.
5. To display Pname and Dname from the tables stock and dealers.

**Interface python with mysql:**

1. Write a program to connect with database to read and store record of employees and display all records.
2. Write a program to connect with database to search/update/delete employee records in the table employee depending upon user’s choice and display the records. If the employee number is not found, the program must display an appropriate message.
3. Rollno
4. Name
5. Gender
6. Age
7. Dept
8. DOA
9. Fees
10. 1
11. Arun
12. M
13. 24
14. COMPUTER
15. 1997-01-10
16. 120
17. 2
18. Ankit
19. M
20. 21
21. HISTORY
22. 1998-03-24
23. 200
24. 3
25. Anu
26. F
27. 20
28. HINDI
29. 1996-12-12
30. 300
31. 4
32. Bala
33. M
34. 19
35. NULL
36. 1999-07-01
37. 400
38. 5
39. Charan
40. M
41. 18
42. HINDI
43. 1997-09-05
44. 250
45. 6
46. Deepa
47. F
48. 19
49. HISTORY
50. 1997-06-27
51. 300
52. 7
53. Dinesh
54. M
55. 22
56. COMPUTER
57. 1997-02-25
58. 210
59. 8
60. Usha
61. F
62. 23
63. NULL
64. 1997-07-31
65. 200