KENDRIYA VIDYALAYA, IIT POWAI
LIST OF PRACTICLES
CLASS XI IP [2020-21]

Practical Marks Distribution

S.No.	Unit Name	Marks
1	Problem solving using Python programming language	11
3	Creating database using MySQL and performing Queries	**7**
4	Practical file (minimum of 14 python programs, and 14 SQL queries)	7
5	Viva-Voce	5
	Total	30

Write python code

- To find average and grade for given marks.

- To find sale price of an item with given cost and discount (%).

- To calculate grade on the basis of marks obtained.

- To calculate perimeter/circumference and area of shapes such as triangle, rectangle, square and circle.

- To calculate Simple and Compound interest.

- To calculate profit-loss for given Cost and Sell Price.

- To make calculator where operation will be done as per user's entry(use has to enter sign +,-,x,/)

- To print following pattern

```
enter the number rows5
    *
   **
  ***
 ****
*****
```

```
enter the number rows5
*****
****
***
**
*
```

```
enter the no of rows:5
1
12
123
1234
12345
```

```
enter the no of rows:5
1
22
333
4444
55555
```

- To display "a" to "u" in the following pattern:

```
a
b   c
d   e   f
g   h   i   j
k   l   m   n   o
p   q   r   s   t   u
```

- To find the largest and smallest numbers in a list.

- To find the third largest/smallest number in a list.

- To find the sum of squares of the first 100 natural numbers.

- To print the first 'n' multiples of given number.

- To prepare software to generate intimation slip for payment by printing only three things i.e. actual billing amount, discount given in Rupees on entered billing amount and net amount to be paid after discount.

  Suppose discount option on billing amount as follows :

Billing Amount	Discount in percentage
Rs. 10,000 or more	20% of billing amount
Rs. 1000 to 9999	10% of billing amount
Rs. 500 to 999	5% of billing amount

- Create a dictionary to store names of states and their capitals.

- Create a dictionary of students to store names and marks obtained in 5 subjects.

- To print the highest and lowest values in the dictionary.

SQL Commands

- To create a database
- To create student table with the student id, class, section, gender, name, dob, and marks as attributes where the student id is the primary key.
- To insert the details of at least 10 students in the above table.
- To display the entire content of table.
- To display Rno, Name and Marks of those students who are scoring marks more than 50.
- To find the average of marks from the student table.
- To find the number of students, who are from section 'A'.

- To display the information all the students, whose name starts with 'AN' (Examples: ANAND, ANGAD,..)
- To display Rno, Name, DOB of those students who are born between '2005- 01-01' and '2005-12-31'.
- To display Rno, Name, DOB, Marks, Email of those male students in ascending order of their names.
- To display Rno, Gender, Name, DOB, Marks, Email in descending order of their marks.
- To display the unique section available in the table.