



# Computer Science practical file (2021-2022)

CENTRAL BOARD OF SECONDARY EDUCATION

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SUBMITTED BY :- ARYAN KUMAR

HOD(COMPUTER) :- Mrs. Sapna rai

CLASS :- 12 TH 'B'

ROLL NO:

# **ACKNOWLEDGEMENT**

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**Thank You**

## **CERTIFICATE**

This is to certify that this project file is a bona-fide work done by Aryan kumar of class XII-B in session 2021-22 in partial fulfillment of CBSE's AISSCE Examination 2021 and has been carried out under my direct supervision and guidance. This report or a similar report on the topic has **not been submitted for any other examination and does not form a part of any other course undergone by the candidate.**

Signature of Principal

Signature of Teacher

Name : **Mrs. Hem Bala**

Name : **Sapna Ma'am**

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10	Perform all the operations with reference to table 'students' through MySQL-Python connectivity.		

## Part A DATA STRUCTURE

- a. Write a menu-driven python program to implement stack operation.

Code:

```
1  #Stack first program
2  def check_stack_isEmpty(stk):
3      if stk==[]:
4          return True
5      else:
6          return False
7  # An empty list to store stack elements, initially empty
8  s=[]
9
10 def main_menu():
11     while True:
12         print("Stack Implementation")
13         print("1 - Push")
14         print("2 - Pop")
15         print("3 - Peek")
16         print("4 - Display")
17         print("5 - Exit")
18         ch = int(input("Enter the your choice:"))
19         if ch==1:
20             el = int(input("Enter the value to push an element:"))
21             push(s,el)
22         elif ch==2:
23             e=pop_stack(s)
24             if e=="UnderFlow":
25                 print("Stack is underflow!")
26             else:
27                 print("Element popped:",e)
28         elif ch==3:
29             e=pop_stack(s)
30             if e=="UnderFlow":
31                 print("Stack is underflow!")
32             else:
33                 print("The element on top is:",e)
34         elif ch==4:
35             display(s)
36         elif ch==5:
37             break
38         else:
39             print("Sorry, You have entered invalid option")
40
```

```

40
41 top = None # This is top pointer for push and pop
42 def push(stk,e):
43     stk.append(e)
44     top = len(stk)-1
45 def display(stk):
46     if check_stack_isEmpty(stk):
47         print("Stack is Empty")
48     else:
49         top = len(stk)-1
50         print(stk[top],"-Top")
51         for i in range(top-1,-1,-1):
52             print(stk[i])
53 def pop_stack(stk):
54     if check_stack_isEmpty(stk):
55         return "UnderFlow"
56     else:
57         e = stk.pop()
58         if len(stk)==0:
59             top = None
60         else:
61             top = len(stk)-1
62     return e
63 def peek(stk):
64     if check_stack_isEmpty(stk):
65         return "UnderFlow"
66     else:
67         top = len(stk)-1
68         return stk[top]
69 main_menu()

```

## Output:

Stack Implementation

1 - Push  
2 - Pop  
3 - Peek  
4 - Display  
5 - Exit

Enter the your choice:1

Enter the value to push an element:23

Stack Implementation

1 - Push  
2 - Pop  
3 - Peek  
4 - Display  
5 - Exit

Enter the your choice:2

Element popped: 23

Stack Implementation

1 - Push  
2 - Pop  
3 - Peek  
4 - Display  
5 - Exit

Enter the your choice:3

Stack is underflow!

Stack Implementation

1 - Push  
2 - Pop  
3 - Peek  
4 - Display

Enter the your choice:3

Stack is underflow!

Stack Implementation

1 - Push  
2 - Pop  
3 - Peek  
4 - Display  
5 - Exit

Enter the your choice:4

Stack is Empty

Stack Implementation

1 - Push  
2 - Pop  
3 - Peek  
4 - Display  
5 - Exit

Enter the your choice:5

In [2]:

**b. Write a program to implement a stack for the employee details (empno, name).**

## Code:-

```
1  stk=[]
2  top=-1
3  def line():
4      print('~'*100)
5  def isEmpty():
6      global stk
7
8      if stk==[]:
9          print("Stack is empty!!!")
10     else:
11         None
12
13  def push():
14      global stk
15      global top
16      empno=int(input("Enter the employee number to push:"))
17      ename=input("Enter the employee name to push:")
18      stk.append([empno,ename])
19      top=len(stk)-1
20
21  def display():
22      global stk
23      global top
24      if top== -1:
25          isEmpty()
26      else:
27          top=len(stk)-1
28          print(stk[top], "<-top")
29          for i in range(top-1, -1, -1):
30              print(stk[i])
31
32  def pop_ele():
33      global stk
34      global top
35      if top== -1:
36          isEmpty()
37      else:
38          stk.pop()
39          top=top-1
40  def main():
41      while True:
42          line()
43          print("1. Push")
44          print("2. Pop")
45          print("3. Display")
46          print("4. Exit")
47          ch=int(input("Enter your choice:"))
48          if ch==1:
49              push()
50              print("Element Pushed")
51          elif ch==2:
52              pop_ele()
53          elif ch==3:
54              display()
55          elif ch==4:
56              break
57          else:
58              print("Invalid Choice")
59  main()
```

## OUTPUT:-

```
~~~~~
1. Push
2. Pop
3. Display
4. Exit
```

Enter your choice:1

Enter the employee number to push:23

Enter the employee name to push:Ashish  
Element Pushed

```
~~~~~
1. Push
2. Pop
3. Display
4. Exit
```

Enter your choice:3

[23, 'Ashish'] <-top

```
~~~~~
1. Push
2. Pop
3. Display
4. Exit
```

Enter your choice:2

[23, 'Ashish']

```
~~~~~
1. Push
2. Pop
3. Display
4. Exit
```

Enter your choice:4

In [3]: |

- c. Write a python program to check whether a string is a palindrome or not using stack.

**Code:**

```
1  stack = []
2  top = -1
3  def push(ele): # push function
4      global top
5      top += 1
6      stack[top] = ele
7  def pop():     # pop function
8      global top
9      ele = stack[top]
10     top -= 1
11     return ele
```



```

12 def isPalindrome(string):
13     global stack
14     length = len(string)
15     stack = ['0'] * (length + 1)
16     mid = length // 2
17     i = 0
18     while i < mid:
19         push(string[i])
20         i += 1
21     if length % 2 != 0:
22         i += 1
23     while i < length:
24         ele = pop()
25         if ele != string[i]:
26             return False
27         i += 1
28     return True
29 string = input("Enter string to check:")
30 if isPalindrome(string):
31     print("Yes, the string is a palindrome")
32 else:
33     print("No, the string is not a palindrome")
34
35

```

## OUTPUT:-

```

Enter string to check:level
Yes, the string is a palindrome

```

```

Enter string to check:neeraj
No, the string is not a palindrome

```

In [5]:

## Mysql queries

Movie_ID	MovieName	Type	Releaseyear	IMDB RATING	Totalearning
M001	Venom	Action	2018	6.7	\$856 million
M002	Pushpa:The Rise	crime file	2022	7.9	365 crores INR
M003	Us	Horror	2019	6.9	\$25.52 crores
M004	Get Out	Horror	2017	7.7	\$25.54 crores
M005	Super 30	Biography	2019	8.0	208.9 crores INR
M006	Midnight sun	Romance	2018	6.6	\$2.74 crores

- a) Display all information from movie.
- b) Display the type of movies.
- c) Display movieid, moviename,totalearning of all movie.
- d) Display movieid, moviename and type of all movies with imdb rating of 6.6 or above
- e) Display the movie of type Action and Horror
- f) Display the list of movies which are released in 2018

Query a).

```
mysql> select * from movie;
```

movie_id	moviename	type	release_year	imdbrating	totalearning
M001	Venom	Action	2018	6.7	\$856 million
M002	Pushpa:The rise	crime file	2022	7.9	365 crores INR
M003	Us	Horror	2019	6.9	\$25.52 crores
M004	Get Out	Horror	2017	7.7	\$25.54 crores
M005	Super 30	Biography	2019	8.0	208.93 crores INR
M006	Midnight Sun	Romance	2018	6.6	\$2.74 crores

```
6 rows in set (0.00 sec)
```

Query b).

```
mysql> select distinct type from movie;
```

type
Action
crime file
Horror
Biography
Romance

```
5 rows in set (0.00 sec)
```

Query c).

```
mysql> select movie_id,moviename,totalearning from movie;
+-----+-----+-----+
| movie_id | moviename      | totalearning |
+-----+-----+-----+
| M001     | Venom          | $856 million |
| M002     | Pushpa:The rise | 365 crores INR |
| M003     | Us             | $25.52 crores |
| M004     | Get Out        | $25.54 crores |
| M005     | Super 30       | 208.93 crores INR |
| M006     | Midnight Sun   | $2.74 crores  |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

Query d).

```
mysql> select movie_id,moviename,type from movie where imdbrating>6.6;
+-----+-----+-----+
| movie_id | moviename      | type         |
+-----+-----+-----+
| M001     | Venom          | Action       |
| M002     | Pushpa:The rise | crime file   |
| M003     | Us             | Horror       |
| M004     | Get Out        | Horror       |
| M005     | Super 30       | Biography    |
+-----+-----+-----+
5 rows in set (0.00 sec)
```

Query e).

```
mysql> select moviename,totalearning from movie where type in
-> ('Action','Horror');
+-----+-----+
| moviename | totalearning |
+-----+-----+
| Venom     | $856 million |
| Us        | $25.52 crores |
| Get Out   | $25.54 crores |
+-----+-----+
3 rows in set (0.00 sec)
```

Query f).

```
mysql> select * from movie where release_year=2018;
+-----+-----+-----+-----+-----+-----+
| movie_id | moviename      | type   | release_year | imdbrating | totalearning |
+-----+-----+-----+-----+-----+-----+
| M001     | Venom          | Action | 2018         | 6.7        | $856 million |
| M006     | Midnight Sun   | Romance | 2018         | 6.6        | $2.74 crores |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

## 2. Write following queries:

- Write a query to display the square root of 4
- Write a query to display the number 48925.34562 rounding off to the next three decimal places
- Write a query to display "put" from the word "Computer".
- Write a query to display today's date into DD.MM.YYYY format.
- Write a query to display 'DIA' from the word "MEDIA".
- Write a query to display moviename - type from the table movie
- Write a query display first four digits or / letters of Total earning

Query a).

```
mysql> select pow(5,3);
+-----+
| pow(5,3) |
+-----+
|      125 |
+-----+
1 row in set (0.00 sec)
```

Query b).

```
mysql> select round(48925.34562,3);
+-----+
| round(48925.34562,3) |
+-----+
|          48925.346 |
+-----+
1 row in set (0.00 sec)
```

Query c).

```
mysql> select mid("computer",4,3);
+-----+
| mid("computer",4,3) |
+-----+
| put                 |
+-----+
1 row in set (0.00 sec)
```

Query d).

```
mysql> select concat(day(now()),concat('.',month(now()),concat('-',year(now())))) "Date";
+-----+
| Date      |
+-----+
| 20.2-2022 |
+-----+
1 row in set (0.00 sec)
```

Query e).

```
mysql> select right("Media",3);
+-----+
| right("Media",3) |
+-----+
| dia              |
+-----+
1 row in set (0.00 sec)
```

Query f).

```
mysql> select concat(moviename,concat('-',type)) from movie;
+-----+
| concat(moviename,concat('-',type)) |
+-----+
| Venom-Action                        |
| Pushpa:The rise-crime file         |
| Us-Horror                          |
| Get Out-Horror                     |
| Super 30-Biography                 |
| Midnight Sun-Romance                |
+-----+
6 rows in set (0.00 sec)
```

Query g).

```
mysql> select left(totalearning,4) from movie;
+-----+
| left(totalearning,4) |
+-----+
| $85                  |
| 365                  |
| $25.                 |
| $25.                 |
| 208.                 |
| $2.7                 |
+-----+
6 rows in set (0.00 sec)
```

3. Suppose your school management has decided to conduct cricket matches between students of Class XI and Class XII. Students of each class are asked to join any one of the four teams – Real madrid, Fc Barcelona, CBF brazil and Liverpool F.C.. During summer vacations, various matches will be conducted between these teams. Help your sports teacher to do the following:

a) Create a database "sports" .

b) Create a table "TEAM" with following considerations:

1. It should have a column TeamID for storing an integer value between 1 to 9, which refers to unique identification of a team.
2. Each TeamID should have its associated name (TeamName), which should be a string of length not less than 10 characters.

3. Using table level constraint, make TeamID as the primary key|

- c) how the structure of the table TEAM using a SQL statement.
- d) As per the preferences of the students four teams were formed as given below.  
Insert these four rows in TEAM table:
  - a. Row 1: (1, Real Madrid )
  - b. Row 2: (2, FC Barcelona)
  - c. Row 3: (3, CBF Brazil)
  - d. Row 3: (4, Liverpool F.C)
- e) Show the contents of the table TEAM using a DML statement.
- f) Now create another table MATCH\_DETAILS and insert data as shown below. Choose appropriate data types and constraints for each attribute

Query a).

```
mysql> create database sports;  
Query OK, 1 row affected (0.02 sec)
```

Query b).

```
mysql> create table team  
-> (teamid int(1),  
-> teamname varchar(20),primary key(teamid));  
Query OK, 0 rows affected, 1 warning (0.06 sec)
```

Query c).

```
mysql> desc team;  
+-----+-----+-----+-----+-----+-----+  
| Field      | Type          | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| teamid     | int           | NO   | PRI | NULL    |       |  
| teamname   | varchar(20)   | YES  |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
2 rows in set (0.01 sec)
```

Query d).

```
mysql> select * from team;  
+-----+-----+  
| teamid | teamname |  
+-----+-----+  
| 1      | Real madrid |  
| 2      | FC Barcelona |  
| 3      | CBF Brazil |  
| 4      | Liverpool F.C. |  
+-----+-----+  
4 rows in set (0.00 sec)
```

Query e).

```
mysql> insert into team
-> values(1,'Real madrid');
Query OK, 1 row affected (0.01 sec)

mysql> insert into team
-> values(1,'FC Barcelona');
ERROR 1062 (23000): Duplicate entry '1' for key 'team.PRIMARY'

mysql> insert into team
-> values(2,'FC Barcelona');
Query OK, 1 row affected (0.01 sec)

mysql> insert into team
-> values(3,'CBF Brazil');
Query OK, 1 row affected (0.02 sec)

mysql> insert into team
-> values(4,'Liverpool F.C.');
```

Query f).

```
mysql> create table match_details
-> (matchid varchar(2),
-> matchdate date,
-> firstteamid int(1) references team(teamid),
-> secondteamid int(1) references team(teamid),
-> firstteamscore int(1),
-> secondteamscore int(1),
-> result varchar(20),primary key(matchid));
Query OK, 0 rows affected, 4 warnings (0.06 sec)
```

Query g).

```
mysql> desc match_details;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| matchid        | varchar(2)    | NO   | PRI | NULL    |       |
| matchdate      | date          | YES  |     | NULL    |       |
| firstteamid    | int           | YES  |     | NULL    |       |
| secondteamid   | int           | YES  |     | NULL    |       |
| firstteamscore | int           | YES  |     | NULL    |       |
| secondteamscore | int           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

Query h).

```
mysql> select * from match_details;
+-----+-----+-----+-----+-----+-----+
| matchid | matchdate   | firstteamid | secondteamid | firstteamscore | secondteamscore |
+-----+-----+-----+-----+-----+-----+
| M1      | 2022-01-12 | 1           | 2           | 3             | 4             |
| M2      | 2022-01-13 | 3           | 4           | 2             | 4             |
| M3      | 2022-01-14 | 1           | 3           | 2             | 4             |
| M4      | 2022-01-15 | 2           | 4           | 3             | 1             |
| M5      | 2022-01-16 | 1           | 4           | 3             | 2             |
| M6      | 2022-01-17 | 2           | 3           | 4             | 1             |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

#### 4. Write following queries:

- Display all the match\_details
- Display distinct teamname from match\_details
- Display matched,matchdate played by Liverpool F.C. and FC Barcelona
- Display matchid,firstteamid,teamname,firstteamscore where first team score was greater than 2
- Display matchid , teamname , firstteamid , secondteamid ,matchid.

Query a).

```
mysql> select * from match_details;
```

matchid	matchdate	firstteamid	secondteamid	firstteamscore	secondteamscore
M1	2022-01-12	1	2	3	4
M2	2022-01-13	3	4	2	4
M3	2022-01-14	1	3	2	4
M4	2022-01-15	2	4	3	1
M5	2022-01-16	1	4	3	2
M6	2022-01-17	2	3	4	1

6 rows in set (0.00 sec)

Query b).

```
mysql> select distinct(teamname) from match_details, team where match_details.firstteamid = team.teamid;
```

teamname
Real madrid
CBF Brazil
FC Barcelona

3 rows in set (0.00 sec)

Query c).

```
mysql> select matchid,matchdate from match_details, team where match_details.firstteamid = team.teamid and team.teamname in ('Liverpool F.C.','FC Barcelona');
```

matchid	matchdate
M4	2022-01-15
M6	2022-01-17

2 rows in set (0.00 sec)

Query d).

```
mysql> select match_details.matchid, match_details.firstteamid, team.teamname,match_details.firstteamscore from match_details, team where match_details.firstteamid = team.teamid and match_details.firstteamscore>2;
```

matchid	firstteamid	teamname	firstteamscore
M1	1	Real madrid	3
M4	2	FC Barcelona	3
M5	1	Real madrid	3
M6	2	FC Barcelona	4

4 rows in set (0.00 sec)



Query e).

```
mysql> select matchid, teamname, firstteamid, secondteamid, matchdate from match_details, team where match_details.firstteamid = team.teamid;
```

matchid	teamname	firstteamid	secondteamid	matchdate
M1	Real madrid	1	2	2022-01-12
M2	CBF Brazil	3	4	2022-01-13
M3	Real madrid	1	3	2022-01-14
M4	FC Barcelona	2	4	2022-01-15
M5	Real madrid	1	4	2022-01-16
M6	FC Barcelona	2	3	2022-01-17

6 rows in set (0.00 sec)

5. Consider the following table and write the queries:

itemno	item	dcode	qty	unitprice	stockdate
S005	chart paper	102	100	10	2021/09/22
S003	Gel Pen	101	150	15	2021/09/24
S002	Pencil	102	125	5	2021/10/24
S006	glitter pen	101	200	3	2021/11/24
S001	geometry box	103	210	5	2021/12/18

- Display all the items in the ascending order of stockdate.
- Display maximum price of items for each dealer individually as per dcode from stock.
- Display all the items in descending orders of itemnames.
- Display average price of items for each dealer individually as per dcode from stock which average price is more than 5.
- Display the sum of quantity for each dcode.

Query a).

```
mysql> select * from stock order by stockdate;
```

itemno	item	dcode	qty	unitprice	stockdate
S005	chart paper	102	100	10	2021-09-22
S003	Gel pen	101	150	15	2021-09-24
S006	A4 sheet	103	160	20	2021-10-24
S002	Pencil	102	125	5	2021-11-24
S001	Geometry Box	103	210	50	2021-12-18

5 rows in set (0.00 sec)

Query b).

```
mysql> select dcode,max(unitprice) from stock group by dcode;
```

dcode	max(unitprice)
102	10
101	15
103	50

3 rows in set (0.01 sec)

Query c).

```
mysql> select * from stock order by item desc;
```

itemno	item	dcode	qty	unitprice	stockdate
S002	Pencil	102	125	5	2021-11-24
S001	Geometry Box	103	210	50	2021-12-18
S003	Gel pen	101	150	15	2021-09-24
S005	chart paper	102	100	10	2021-09-22
S006	A4 sheet	103	160	20	2021-10-24

5 rows in set (0.00 sec)

Query d).

```
mysql> select dcode,avg(unitprice) from stock group by dcode having avg(unitprice)>5;
```

dcode	avg(unitprice)
102	7.5000
101	15.0000
103	35.0000

3 rows in set (0.01 sec)

Query e).

```
mysql> select dcode,sum(qty) from stock group by dcode;
```

dcode	sum(qty)
102	225
101	150
103	370

3 rows in set (0.00 sec)

## Part C Python Database Connectivity

a). Integrate MySQL with Python by importing the MySQL module and do following tasks:-

1. Create Database
2. Drop Database
3. Create Table
4. Insert Record
5. Display Entire Data
- 6.Exit

### Code:-

```
1  #connectivity program
2  import pymysql as ms
3  #Function to create Database as per users choice
4  def c_database():
5      try:
6          dn=input("Enter Database Name=")
7          c.execute("create database {}".format(dn))
8          c.execute("use {}".format(dn))
9          print("Database created successfully")
10     except Exception as a:
11         print("Database Error",a)
12 #Function to Drop Database as per users choice
13 def d_database():
14     try:
15         dn=input("Enter Database Name to be dropped=")
16         c.execute("drop database {}".format(dn))
17         print("Database deleted successfully")
18     except Exception as a:
19         print("Database Drop Error",a)
20 #Function to create Table
21 def c_table():
22     try:
23         c.execute('''create table students
24                     (
25                         rollno int(3),
26                         stname varchar(20)
27                     );
28         ''')
29         print("Table created successfully")
30     except Exception as a:
31         print("Create Table Error",a)
32 #Function to Insert Data
33 def e_data():
34     try:
35         while True:
36             rno=int(input("Enter student rollno="))
37             name=input("Enter student name=")
38             c.execute("use {}".format('school1'))
39             c.execute("insert into students values({}, '{}');".format(rno,name))
40             db.commit()
```

```

40         db.commit()
41         choice=input("Do you want to add more record<y/n>=")
42         if choice in "Nn":
43             break
44         except Exception as a:
45             print("Insert Record Error",a)
46 #Function to Display Data
47 def d_data():
48     try:
49         c.execute("select * from students")
50         data=c.fetchall()
51         for i in data:
52             print(i)
53     except Exception as a:
54         print("Display Record Error",a)
55
56 db=ms.connect(host="localhost",user="root",password="monarch")
57 c=db.cursor()
58 while True:
59     print("MENU\n1. Create Database\n2. Drop Database \n3.Create Table\n4. Insert Record \n5. Display Entire\n6.Exit")
60     choice=int(input("Enter your choice<1-6>="))
61     if choice==1:
62         c_database()
63     elif choice==2:
64         d_database()
65     elif choice==3:
66         c_table()
67     elif choice==4:
68         e_data()
69     elif choice==5:
70         d_data()
71     elif choice==6:
72         break
73     else:
74         print("WRONG OPTION SELECTED")

```

## Output:-

```

MENU
1. Create Database
2. Drop Database
3.Create Table
4. Insert Record
5. Display Entire Data
6.Exit

Enter your choice<1-6>=1

Enter Database Name=lol
Database created successfully
MENU
1. Create Database
2. Drop Database
3.Create Table
4. Insert Record
5. Display Entire Data
6.Exit

Enter your choice<1-6>=3
Table created successfully
MENU
1. Create Database
2. Drop Database
3.Create Table
4. Insert Record
5. Display Entire Data
6.Exit

Enter your choice<1-6>=4

Enter student rollno=23

Enter student name=aryan

Do you want to add more record<y/n>=n
MENU
1. Create Database
2. Drop Database
3.Create Table
4. Insert Record
5. Display Entire Data
6.Exit

Enter your choice<1-6>=5
(23, 'aryan')
MENU
1. Create Database
2. Drop Database
3.Create Table
4. Insert Record
5. Display Entire Data
6.Exit

Enter your choice<1-6>=2

Enter Database Name to be dropped=lol
Database deleted sucessfully

```

b). Integrate MySQL with Python by importing the MySQL module and do following tasks:-

- 1.Insert Record
- 2.Update Record
3. Delete Record
4. Display Record
5. Exit

## Code:-

```
1  import os
2  import platform
3  import mysql.connector
4
5  mydb=mysql.connector.connect(host="localhost",user="root",password="monarch",database='school',cha
6  print(mydb)
7  mycursor=mydb.cursor()
8
9  def stuInsert():
10     L=[]
11     roll=int(input("Enter the roll number : "))
12     L.append(roll)
13     name=input("Enter the Name: ")
14     L.append(name)
15     age=int(input("Enter Age of Student : "))
16     L.append(age)
17     clas=input("Enter the Class : ")
18     L.append(clas)
19
20     stud=(L)
21     sql="insert into student (roll_number,name,age,class) values (%s,%s,%s,%s)"
22     mycursor.execute(sql,stud)
23     mydb.commit()
24
25 def stuvview():
26     mycursor.execute("select * from student")
27     myrus=mycursor.fetchall()
28     for x in myrus:
29         print(x)
30
31 def MenuSet(): #Function For The Student Management System
32     print("Enter 1 : To Add Student")
33     print("Enter 2 : To View Students")
34     userInput = int(input("Please Select An Above Option: ")) #Will Take Input From User
35     if(userInput == 1):
36         stuInsert()
37     if(userInput == 2):
38         stuvview()
39
40 MenuSet()
```

```

39 def runAgain():
40     runAgn = input("\nwant To Run Again Y/n: ")
41     while(runAgn.lower() == 'y'):
42         if(platform.system() == "Windows"):
43             print(os.system('cls'))
44         else:
45             print(os.system('clear'))
46         MenuSet()
47         runAgn = input("\nwant To Run Again y/n: ")
48
49 runAgain()
50

```

## Output:-

```
<mysql.connector.connection.MySQLConnection object at 0x00000217038D5C10>
```

```
Enter 1 : To Add Student
```

```
Enter 2 : To View Students
```

```
Please Select An Above Option: 1
```

```
Enter the roll number : 17
```

```
Enter the Name: Abhinav
```

```
Enter Age of Student : 16
```

```
Enter the Class : 11
```

```
want To Run Again Y/n: Y
```

```
0
```

```
Enter 1 : To Add Student
```

```
Enter 2 : To View Students
```

```
Please Select An Above Option: 2
```

```
(1, 17, 12, 'ANJU JHA')
```

```
(2, 16, 11, 'YASH')
```

```
(3, 16, 12, 'ANIKET JAISWAR')
```

```
(4, 15, 10, 'SANGEETA')
```

```
(5, 15, 10, 'SAKIRA')
```

```
(6, 16, 11, 'YAMINI')
```

```
(7, 15, 10, 'ANJU')
```

```
(8, 16, 12, 'DHRUV')
```

```
(9, 16, 11, 'ALOK')
```

```
(23, 18, 12, 'Ashish')
```

```
(17, 16, 11, 'Abhinav')
```

```
want To Run Again y/n: n
```

..... THANK YOU!!.....