

**HOPE HALL FOUNDATION SCHOOL,  
SECTOR -7 , RK PURAM, NEW DELHI-110022**



Subject : Computer Science

Project Topic: Student Result Management System

Session : 2022-2023

Submitted By: **Yashvi Singh**

Class : XII-B

Submitted To :

Ms Nirmala Singh

Date of Submission:

# STUDENT RESULT MANAGEMENT SYSTEM

"We ensure better teaching for better future"

~Teachers



"We ensure better learning for better future "

~Students

**Submitted By :**  
**Yashvi Singh**

## CERTIFICATE

This is to certify that Yashvi Singh of class XII- B has successfully completed her Computer Science project on the topic "**Student Result Management System**" under my guidance.

I wish her success in her life.

Examiner Name:

Signature

Date:

## **ACKNOWLEDGEMENT**

I, Yashvi Singh, student of Hope Hall Foundation School would like to express our special thanks of gratitude to our computer science teacher **Ms. Nirmala Singh**, who gave me the golden opportunity to do this wonderful project, which also helped me in doing a lot of research and we came to know about so many new things we're really thankful to them.

Secondly we are thankful to our members who cooperated and took the initiative themselves and made this project.

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# 1. HARDWARE AND SOFTWARE SPECIFICATIONS

## ❖ Software Requirements Specification

Python

Microsoft Visual Studio 2008

Microsoft SQL Server 2005

Google Docs : For creating synopsis of the project

Microsoft Word : For creating flowchart

MySQL 8.0 Command Line Client : For creating databases

## ❖ Hardware Requirements Specification

Processor: Intel Pentium 4 or more

Ram: 1 GB or more

Hard disk: 40 GB hard disk recommended for the primary partition.

Printer : For printing hardcopy of the project

## **2. INTRODUCTION**

Th, prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The aim is to automate its existing manual system by the help of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients.

### 3. **OBJECTIVES**

It provides an easy registration process and easy to manage student results. It makes automatic transcripts and certificates within a short period of time. It is user friendly, effective and necessary in today's world. Through such platforms, information reaches within a short period of time.

It is helpful in so many cases when people cannot move out. In a large number of students the coding has to be done so that instead of spending so much time doing manual calculation for grades and %. It can be done on its own and also helps in reducing the time required to create results.



#### 4. PROGRAM SPECIFICATIONS

The programming will be done describing the way schools or even on a much larger scale how CBSE creates results of such a large number of the students.

The following program creates a data type student which includes the following members:

- 1.Name
- 2.Admission Number
- 3.Class
- 4.Marks in 5 Subjects
- 5.Total
- 6.Average
- 7.Percentage(%)

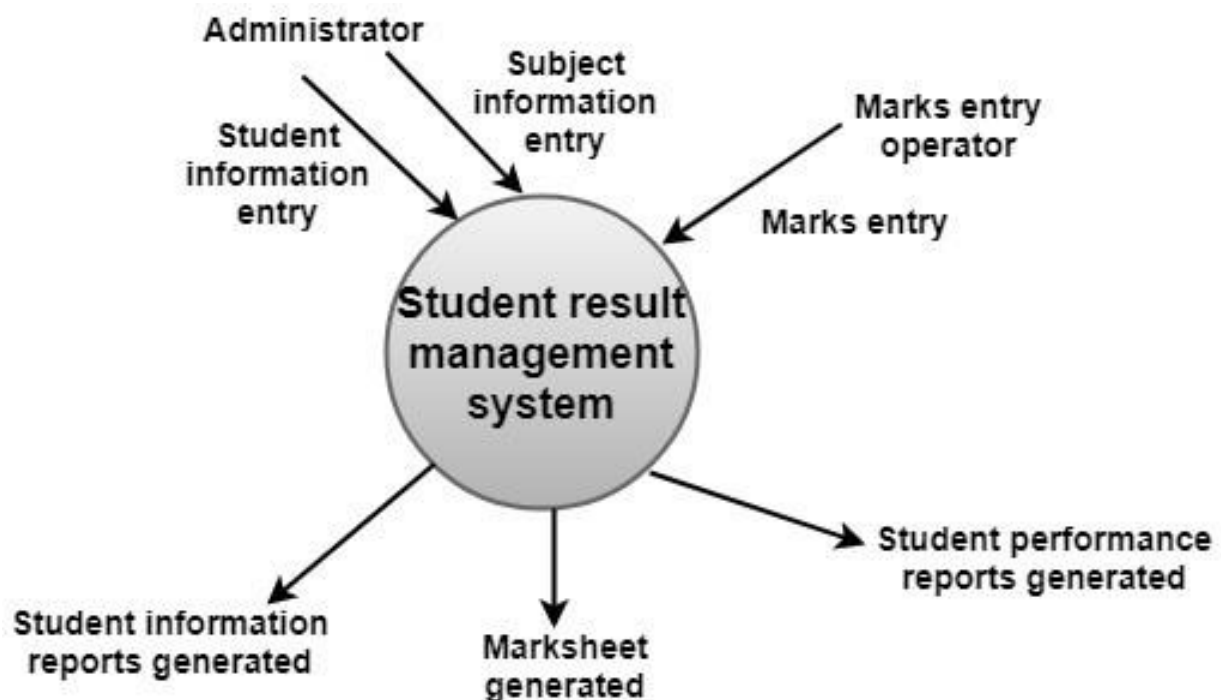
It also allows you to modify or make changes with student details.

It also shows class wise toppers.

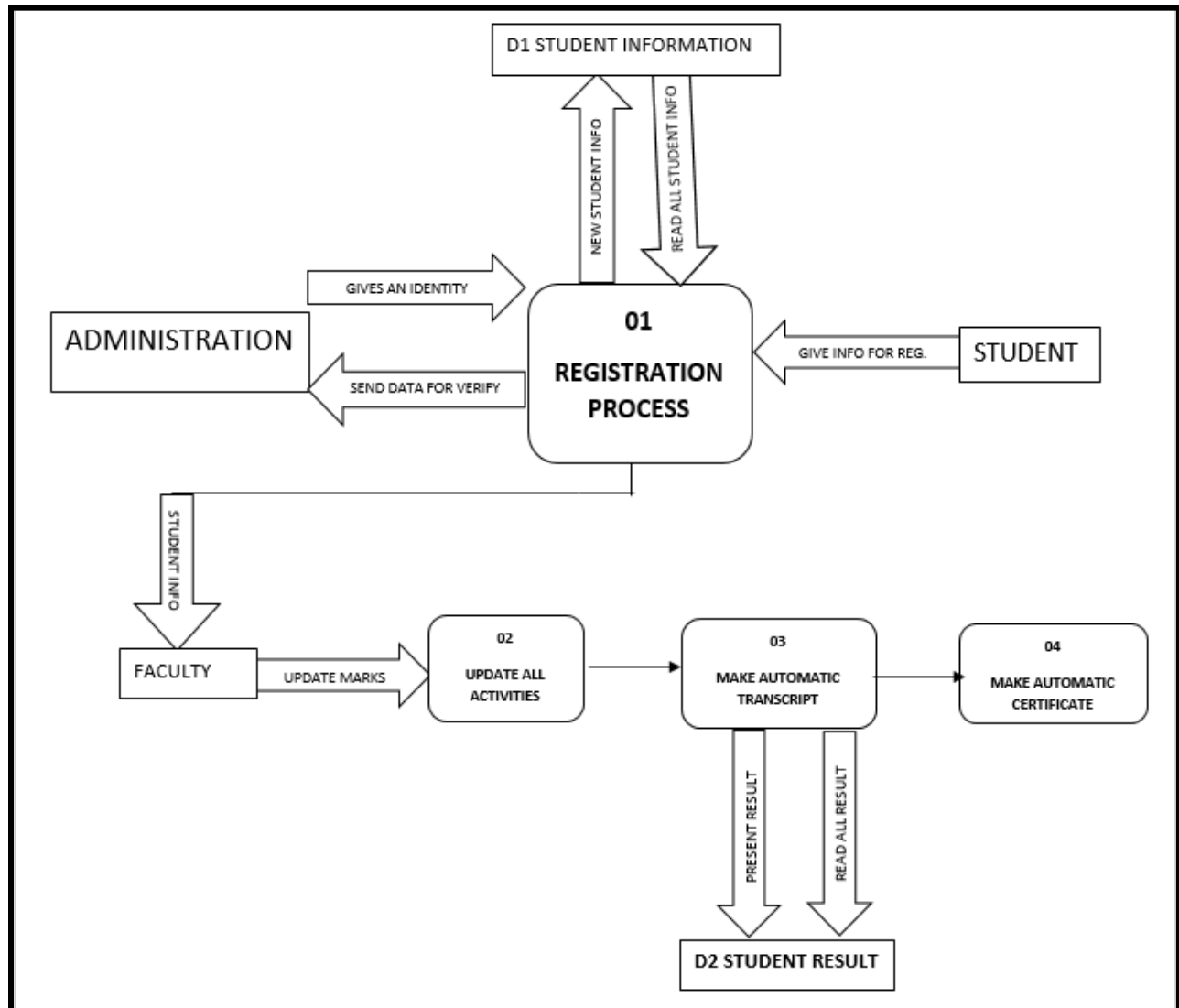
## 5. FLOWCHARTS

- (i) Context diagram (DFD o level)
- (ii) Data Flow diagram ( DFD level)
- (iii) Use Case Diagram

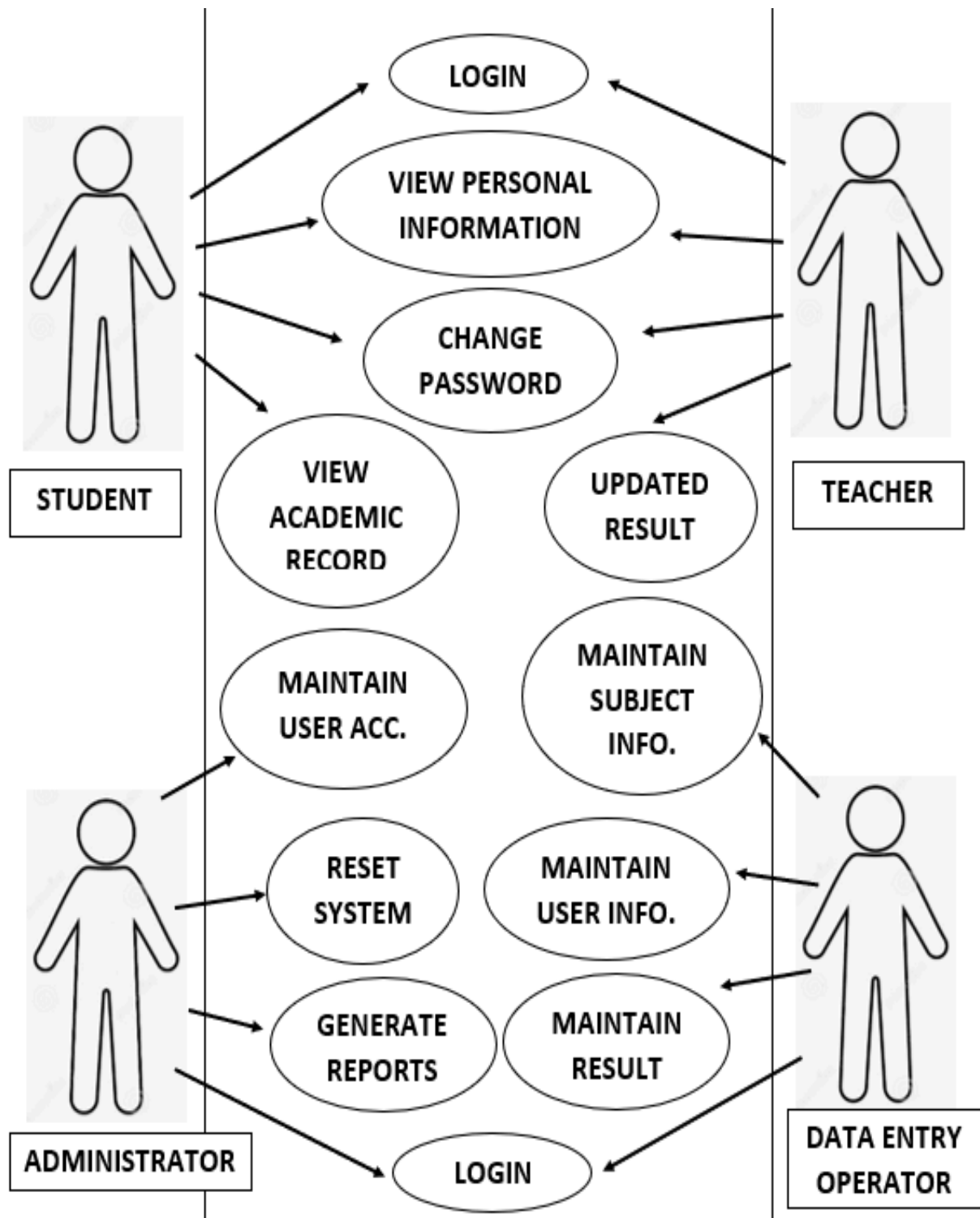
### (i) CONTEXT DIAGRAM (DFD o level)



## (ii) DATA FLOW DIAGRAM (DFD level)



### (iii) USE CASE DIAGRAM



## **CODING :**

```
def main():  
    print("""STUDENT RESULT MANAGEMENT SYSTEM
```

```
=====
```

- ```
=====
```
1. ENTER STUDENT DETAILS
  2. FETCH ALL THE STUDENT DETAILS
  3. INPUT STUDENT MARKS
  4. UPDATE STUDENT DETAILS
  5. DISPLAY CLASSWISE TOPPER
  6. DISPLAY AVERAGE CLASSWISE MARKS
  7. EXIT""")

```
c=int(input("enter choice:::"))
```

```
if c==1:
```

```
    ad()
```

```
    main()
```

```
elif c==2:
```

```
    s()
```

```
    main()
```

```
elif c==3:
```

```
    marks()
```

```
    main()
```

```
elif c==4:
```

```
    studetail()
```

```
    main()
```

```
elif c==5:
```

```
    top()
```

```
    main()
```

```
elif c==6:
    avg()
elif c==7:
    exit()
else:
    print("Invalid Input")
```

**def ad():**

```
import mysql.connector as a
```

```
cur=a.connect(host="localhost",user="root",passwd="mini@2007",chars
et="utf8",database="school")
cursor=cur.cursor()
choice="Y"
while choice=="Y":
    a=int(input("enter admission number::"))
    name=input("enter name of the student::")
    clas=int(input("enter class::"))
    st="Insert into detail(admn_num,name,class)
Values({},'{}'.format(a,name,clas)
    cursor.execute(st)
    cur.commit()
    choice=input("enter your choice if you would like to continue
adding more student details input<y> else press any key::")
```

**def s():**

import mysql.connector as a

cur=a.connect(host="localhost",user="root",passwd="mini@2007",charset="utf8",database="school")

cursor=cur.cursor()

cursor.execute("select \* from detail")

data=cursor.fetchall()

count=cursor.rowcount

print("No of records::",count)

print

("{:<14} {:<22} {:>80}".format("ADMN\_NUM","NAME","CLASS"))

for ele1,ele2,ele3 in data:

print ("{:<14} {:<22} {:>80}".format(ele1,ele2,ele3))

**def marks():**

import mysql.connector as a

cur=a.connect(host="localhost",user="root",passwd="mini@2007",charset="utf8",database="school")

cursor=cur.cursor()

choice="Y"

s="select m.admn\_num,d.name,d.class from detail d,marks m where d.admn\_num=m.admn\_num"

cursor.execute(s)

data=cursor.fetchall()

cur.commit()

print("The marks of following students is already being entered::")

```
print("{:<14} {:<22} {:>80}".format("ADMN_NUM","NAME","CLASS"))
```

```
for a,b,c in data:
```

```
    print("{:<14} {:<22} {:>80}".format(a,b,c))
```

```
print("=====")
```

```
print("INPUT MARKS:::")
```

```
while choice=="Y":
```

```
    a=int(input("enter admission number:::"))
```

```
    phy=int(input("enter physics marks:::"))
```

```
    english=int(input("enter english marks:::"))
```

```
    com=int(input("enter cs marks:::"))
```

```
    chem=int(input("enter chemistry marks:::"))
```

```
    maths=int(input("enter maths marks:::"))
```

```
    st="Insert into
```

```
marks(admn_num,physics,chemistry,maths,english,computer_sci,total)
```

```
Values({}, {}, {}, {}, {}, {}, {})".format(a,phy,chem,maths,english,com,phy+chem+maths+english+com)
```

```
    cursor.execute(st)
```

```
    cur.commit()
```

```
    choice=input("enter your choice if you would like to continue  
adding more student details input<Y> else press any key:::")
```

```
def studetail():
```

```
    import mysql.connector as a
```

```
cur=a.connect(host="localhost",user="root",passwd="mini@2007",charset="utf8",database="school")
```

```
    cursor=cur.cursor()
```



```

choice="Y"
while choice=="y" or "Y" or "YES" or "yes":
    a=int(input("enter admn_num::"))
    s="select * from detail where ADMN_NUM={}".format(a)
    cursor.execute(s)
    data=cursor.fetchall()
    cur.commit()
    for ele1,ele2,ele3 in data:

print("{:<14} {:<13} {:>15}".format("ADMN_NUM","NAME","CLASS
"))
    print (" {:<14} {:<13} {:>15}".format(ele1,ele2,ele3))

print("=====
=====")

    b=int(input("type
1 for updating student's name
2 for updating class"))
    if b==1:
        nm=input("enter new name::")
        sc="update detail set name='{}' where
admn_num={}".format(nm,a)
        cursor.execute(sc)
        cur.commit()
        print("Updation successful")
    elif b==2:
        clss=int(input("enter new class::"))

```

```

        sc="update detail set class={} where
admn_num={} ".format(cls,a)
        cursor.execute(sc)
        cur.commit()
        print("Updation successful")
        choice=input("enter your choice if you would like to continue
adding more student details input<yes/YES/Y/Y> else press any key::")

```

**def top():**

```

    import mysql.connector as a

    cur=a.connect(host="localhost",user="root",passwd="mini@2007",charset="utf8",database="school")
    cursor=cur.cursor()
    s="select d.admn_num,d.name,d.class,max(total),max(total)/5
    from detail d,marks m
    where d.admn_num=m.admn_num
    group by class"
    cursor.execute(s)
    data=cursor.fetchall()
    cur.commit()

    print("{:<14} {:<15} {:<19} {:>35} {:>70}".format("ADMN_NUM","NAME","CLASS","TOTAL","PERCENTAGE"))
    for a,b,c,d,e in data:

    print("{:<14} {:<15} {:<19} {:>35} {:>70}".format(a,b,c,d,str(e)+"%"))

```

**def avg():**

import mysql.connector as a

cur=a.connect(host="localhost",user="root",passwd="mini@2007",charset="utf8",database="school")

cursor=cur.cursor()

s="select class,avg(total) from marks,detail group by class"

cursor.execute(s)

data=cursor.fetchall()

print("{:<14} {:>20}".format("CLASS","AVERAGE"))

for a,b in data:

print("{:<14} {:>20}".format(a,b))

**def exit():**

print("You have successfully exited!!")

main()

15 rows in set (0.09 sec)

```
mysql> select * from detail;
```

| ADMN_NUM | NAME             | CLASS |
|----------|------------------|-------|
| 1234     | HIMANSHU JAIN    | 11    |
| 2678     | MANAS PARMAR     | 11    |
| 3004     | RADHIKA MEHRA    | 10    |
| 3452     | AJAY             | 12    |
| 4573     | GEORGETTE        | 11    |
| 5678     | PALLAVI PANDEY   | 11    |
| 6678     | DIKSHA           | 11    |
| 6784     | SHRUTI CHAUDHARY | 12    |
| 7890     | AVANTIKA NAGRAL  | 10    |
| 8345     | ISHIKA SHARMA    | 12    |
| 8541     | KASAK SINGH      | 12    |
| 8840     | YASMEEN          | 12    |
| 8900     | KETAN            | 12    |
| 8912     | AYUSH AGGARWAL   | 12    |
| 9962     | PRISHA SHARMA    | 12    |

15 rows in set (0.09 sec)

```
mysql>
```

```
mysql> select * from marks;
```

| adm_nu_m | physics | chemistry | maths | english | computer_sci | total |
|----------|---------|-----------|-------|---------|--------------|-------|
| 1009     | 56      | 90        | 27    | 67      | 88           | 328   |
| 1234     | 90      | 34        | 76    | 99      | 88           | 387   |
| 2678     | 89      | 45        | 67    | 76      | 55           | 332   |
| 3004     | 57      | 33        | 90    | 78      | 45           | 303   |
| 3452     | 98      | 34        | 90    | 67      | 45           | 334   |
| 4573     | 67      | 72        | 68    | 89      | 56           | 352   |
| 5678     | 46      | 98        | 90    | 67      | 43           | 344   |
| 7890     | 98      | 45        | 66    | 76      | 56           | 341   |
| 8345     | 90      | 34        | 56    | 76      | 56           | 312   |
| 8840     | 56      | 67        | 76    | 89      | 98           | 386   |
| 8900     | 67      | 89        | 90    | 55      | 45           | 346   |

11 rows in set (0.06 sec)

## Command 1: Enter Student Details

```
==== RESTART: C:\Users\Mahi\AppData\Local\Programs\Python\Python39\yashv.py ====
STUDENT RESULT MANAGEMENT SYSTEM
=====
1. ENTER STUDENT DETAILS
2. FETCH ALL THE STUDENT DETAILS
3. INPUT STUDENT MARKS
4. UPDATE STUDENT DETAILS
5. DISPLAY CLASSWISE TOPPER
6. EXIT
enter choice:::1
enter admission number:::2346
enter name of the student:::JAYANTI GOYEL
enter class:::10
enter your choice if you would like to continue adding more student details input<y> else press any key::Y
enter admission number:::1075
enter name of the student:::KANIKA NARAYAN
enter class:::12
enter your choice if you would like to continue adding more student details input<y> else press any key::N
=====
```

## Command 2 : Fetch all the Student Details

```
6. EXIT
enter choice:::2
No of records::: 17
ADMN_NUM      NAME                                     CLASS
1075          KANIKA NARAYAN                             12
1234          HIMANSHU JAIN                               11
2346          JAYANTI GOYEL                                10
2678          MANAS PARMAR                                  11
3004          RADHIKA MEHRA                                10
3452          AJAY   12
4573          GEORGETTE                                    11
5678          PALLAVI PANDEY                              11
6678          DIKSHA  11
6784          SHRUTI CHAUDHARY                             12
7890          AVANTIKA NAGRAL                             10
8345          ISHIKA SHARMA                               12
8541          KASAK SINGH                                 12
8840          YASMEEN                                     12
8900          KETAN  12
8912          AYUSH AGGARWAL                             12
9962          PRISHA SHARMA                              12
```

## Command 3 : Input Student Marks

```
6. EXIT
enter choice:::3
The marks of following students is already being entered:::
ADMN_NUM      NAME                                     CLASS
1234          HIMANSHU JAIN                             11
2678          MANAS PARMAR                               11
3004          RADHIKA MEHRA                              10
3452          AJAY                                       12
4573          GEORGETTE                                  11
5678          PALLAVI PANDEY                             11
7890          AVANTIKA NAGRAL                           10
8345          ISHIKA SHARMA                              12
8840          YASMEEN                                    12
8900          KETAN                                       12
=====
INPUT MARKS:::
enter admission number:::1075
enter physics marks:::90
enter english marks:::78
enter cs marks:::56
enter chemistry marks:::78
enter maths marks:::45
enter your choice if you would like to continue adding more student details input<Y> else press any key::Y
enter admission number:::6784
enter physics marks:::90
enter english marks:::98
enter cs marks:::97
enter chemistry marks:::96
enter maths marks:::90
enter your choice if you would like to continue adding more student details input<Y> else press any key::n
=====
```

## Command 4 : Update Student Details

```
enter choice:::4
enter admn_num:::8900
ADMN_NUM      NAME                                     CLASS
8900          KETAN                                       11
=====
type
  1 for updating student's name
  2 for updating class2
enter new class:::12
Updation successful
enter your choice if you would like to continue adding more student details input<yes/YES/Y/Y> else press any key::Y
enter admn_num:::1234
ADMN_NUM      NAME                                     CLASS
1234          HIMANSHU JAIN                             11
=====
type
  1 for updating student's name
  2 for updating class1
enter new name:::HIMANSHU GUPTA
Updation successful
enter your choice if you would like to continue adding more student details input<yes/YES/Y/Y> else press any key::N
```

## Updated Details in the Database

```
mysql> select * from detail;
+-----+-----+-----+
| ADMN_NUM | NAME           | CLASS |
+-----+-----+-----+
1075	KANIKA NARAYAN	12
1234	HIMANSHU GUPTA	11
2346	JAYANTI GOYEL	10
2678	MANAS PARMAR	11
3004	RADHIKA MEHRA	10
3452	AJAY	12
4573	GEORGETTE	11
5678	PALLAVI PANDEY	11
6678	DIKSHA	11
6784	SHRUTI CHAUDHARY	12
7890	AVANTIKA NAGRAL	10
8345	ISHIKA SHARMA	12
8541	KASAK SINGH	12
8840	YASMEEN	12
8900	KETAN	12
8912	AYUSH AGGARWAL	12
9962	PRISHA SHARMA	12
+-----+-----+-----+
17 rows in set (0.05 sec)
```

## Command 5 : Display Classwise Topper

```
===== RESTART: C:\Users\Mahi\AppData\Local\Programs\Python\Python39\python.py =====
STUDENT RESULT MANAGEMENT SYSTEM
=====
1. ENTER STUDENT DETAILS
2. FETCH ALL THE STUDENT DETAILS
3. INPUT STUDENT MARKS
4. UPDATE STUDENT DETAILS
5. DISPLAY CLASSWISE TOPPER
6. EXIT
enter choice:::5
ADMN_NUM  NAME           CLASS  TOTAL  PERCENTAGE
1075     KANIKA NARAYAN 12     471    94.2000%
1234     HIMANSHU GUPTA 11     387    77.4000%
3004     RADHIKA MEHRA  10     341    68.2000%
```

```
mysql> select d.admn_num,d.name,d.class,max(total)
-> from detail d,marks m
-> where d.admn_num=m.admn_num
-> group by class;
+-----+-----+-----+-----+
| admn_num | name           | class | max(total) |
+-----+-----+-----+-----+
1075	KANIKA NARAYAN	12	471
1234	HIMANSHU GUPTA	11	387
3004	RADHIKA MEHRA	10	341
+-----+-----+-----+-----+
3 rows in set (0.04 sec)
```

Command 6 : To display average marks of each class

```
>>>
===== RESTART: C:\Users\Mahi\Ap
STUDENT RESULT MANAGEMENT SYSTEM
=====
1. ENTER STUDENT DETAILS
2. FETCH ALL THE STUDENT DETAILS
3. INPUT STUDENT MARKS
4. UPDATE STUDENT DETAILS
5. DISPLAY CLASSWISE TOPPER
6. DISPLAY AVERAGE CLASSWISE MARKS
6. EXIT
enter choice::::6
CLASS                AVERAGE
12                   352.5385
11                   352.5385
10                   352.5385
>>>
```

Command 7 : Exit

```
===== RESTART: C:\Users\Mahi\Ap
STUDENT RESULT MANAGEMENT SYSTEM
=====
1. ENTER STUDENT DETAILS
2. FETCH ALL THE STUDENT DETAILS
3. INPUT STUDENT MARKS
4. UPDATE STUDENT DETAILS
5. DISPLAY CLASSWISE TOPPER
6. EXIT
enter choice::::6
You have successfully exited!!
>>>
```



## **BIBLIOGRAPHY**

### **BOOKS REFERRED**

- Computer science by Sumita Arora[class XI]
- Computer science by Sumita Arora[class XII]

### **SITES REFERRED**

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