**A PROJECT OF PYTHON ON**

**SMART ATTENDENCE**



**SUBMITTED BY**

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CLASS: XII- A

ROLL NO- 5

**UNDER THE GUIDANCE OF :**

**Mr. Sunil Sharma**

**(COMPUTER SCIENCE PGT)**

**CERTIFICATE**

This is to certify that VIPIN PRATAP of class XII-A has prepared the report on the project entitled “SMART ATTENDENCE”.

The report is the result of his efforts and endeavours. The report is found worthy of acceptance as final project report for the Computer Science of Class XII. He has prepared the report under my guidance.

Mr.SunilSharma

(Computer Science PGT)

**ACKNOWLEDGEMENT**

I would like to express a deep sense of thanks & gratitude to my project guide Mr. Sunil Sharma Sir for guiding me immensely through the course of project. She always evinced keen interest in my work. Her constructive advice & constant motivation has been responsible for the successful completion of this project. I also thank to my parents for their motivation and support. I must thank to my classmates as well. **Last but not least; I would like to thank all those who had supported me directly and indirectly in any manner for completion of this project.**

**Vipin pratap**

**XII-A**

**ABOUT THE PROJECT**

This project is designed to take attendence by the excel file and save attendence in excel format or in MySQL as table format.

It need a excel file which has Roll no. and student names and after that it take attendence in excel or a mysql according to user choice.

It supports all extension of excel ( like .xlsx , .xlsm , .xls , etc.)

It will useful for teachers to store and take attendence in a easy way.

**CODING**

'''

smart attendence

version: 5.1

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'''

# ''pip install -r require\_smart.txt''

import os

import xlrd

import xlwt

import getpass

import datetime

import openpyxl

import colorama

import mysql.connector as connector

from xlutils.copy import copy

from xlrd import open\_workbook

from prettytable import PrettyTable,from\_db\_cursor

from colorama import Fore,Back,Style

from openpyxl.styles import PatternFill

colorama.init()

pt=PrettyTable()

def info():

print(' This will accept excel file which are present only in the folder of this executable file of python\n')

print(' It take attendence in excel and in mysql also from excel \n')

print(' You can use file excel file with extenstions -\n .xls , .xlsx , .xlsm , .xlts , .xltm \n')

today=datetime.datetime.now()

print(Fore.YELLOW + ' DATE-',today.strftime("%x"))

print(' TIME-',today.strftime("%X"))

time="{}{}\_{}\_{}\_{}".format(today.strftime("%b").upper(),today.strftime("%d"),today.strftime("%Y"),today.strftime("%H"),today.strftime("%M"))

def co(host,usr,passwd,d=''):

global con

con=connector.connect(host=host,port='3306',user=usr,password=passwd,database=d)

print(Fore.RESET,Style.BRIGHT,Fore.MAGENTA)

#Print results from database in table

def print\_t(cursor\_object):

table = from\_db\_cursor(cursor\_object)

table.align = 'l'

print(table)

user=(input(Fore.YELLOW+'Enter Name: '))

if user=='':

user = getpass.getuser()

print('\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*')

print(Fore.CYAN)

pt.field\_names=[ 'HELLO',user.upper(),'SIR']

pt.add\_row([' ','GOOD MORNING , WELCOME TO SMART ATTENDENCE',' '])

print(pt)

# it take file name if any error found it again ask for file

print(Fore.RESET)

print(Fore.GREEN)

info()

while True:

loc =str(input(Fore.MAGENTA + "Enter your file name: "))

try:

print(Fore.CYAN)

#this try to open xls file of excel with the prettytable

p=PrettyTable()

wb = xlrd.open\_workbook(loc)

sheet =wb.sheet\_by\_index(0)

sheet.cell\_value(0,0)

x=sheet.nrows

p.field\_names=sheet.row\_values(0)

for i in range(1,x):

p.add\_row(sheet.row\_values(i))

print(p)

print(' ')

y=int(input(Fore.MAGENTA + 'Enter column no. of Names: '))

c=sheet.col\_values(y-1)

col=sheet.col\_values(0)

break

except:

print(Fore.CYAN)

try:

#this try to read your xlsx,xlsm,xltx and xltm files

t=list()

c=list()

col=list()

wb\_obj = openpyxl.load\_workbook(loc)

sheet\_obj = wb\_obj.active

m\_col =sheet\_obj.max\_column+1

m\_row=sheet\_obj.max\_row

def iter\_rows(sheet\_obj,a):

result=list()

for row in sheet\_obj.iter\_rows(a,a):

for cell in row:

result.append(cell.value)

yield result

z=list(iter\_rows(sheet\_obj,1))

tab=PrettyTable()

tab.field\_names=z[0]

no=m\_row+1

for i in range(2,no):

z=list(iter\_rows(sheet\_obj,i))

tab.add\_row(z[0])

print(tab)

def path(path,y,nam):

wb\_obj = openpyxl.load\_workbook(path)

sheet\_obj = wb\_obj.active

for i in range(1, m\_col):

cell\_obj = sheet\_obj.cell(row = y, column = i)

t.append(cell\_obj.value)

for i in range(1,m\_row+1):

cell\_obj1=sheet\_obj.cell(row=i,column=nam)

c.append(cell\_obj1.value)

row1=int(input(Fore.MAGENTA + 'Enter column no of Roll no: '))

nam=int(input(Fore.MAGENTA + 'Enter column no. of Names: '))

for i in range(1,m\_col):

path(loc,i,nam)

for i in range(1,m\_row+1):

cell\_obj2=sheet\_obj.cell(row=i,column=row1)

col.append(cell\_obj2.value)

x=len(col)-m\_row

while x>0:

col.pop(0)

c.pop(0)

x=x-1

break

except:

print(Fore.RED + "file is not found try again")

print(' ')

print(Fore.GREEN)

#this function try to make letter into title form so that we can easily compared

def cap(c):

x=len(c)

for i in range(x):

a=c[i].title()

c.append(a)

while x>0:

c.pop(0)

x=x-1

cap(c)

l=list()

count=0

enter='Enter your Name or Roll no: '

print('1: Attendence in excel')

print('2: Attendence in My Sql')

print('3: Attendence in python(will not save)')

Q=int(input(Fore.MAGENTA + 'Your Input: '))

print(' ')

if Q==1:

print(' ')

enter='Enter your Roll no: '

print(' ')

file=str(input(Fore.MAGENTA + 'Enter your excel file name with or .xlsx to save it: '))

try:

excel\_file = openpyxl.load\_workbook(loc)

excel\_sheet = excel\_file.active

excel\_sheet.cell(row=1, column=m\_col).value ='Attendence'

for i in range(1,m\_row):

excel\_sheet.cell(row=i+1, column=m\_col).value ='Absent'

excel\_sheet.cell(row=i+1, column=m\_col).fill=PatternFill('solid',fgColor='DC143C')

excel\_file.save(file)

except:

rb = open\_workbook(loc)

wb = copy(rb)

s = wb.get\_sheet(0)

s.write(0,x-1,'Attendence')

for i in range(0,x-1):

s.write(i+1,x-1,'absent')

wb.save(file)

elif Q==2:

os.system('clear')

print('Mysql connection making.....\n')

for \_ in range(3):

print(Fore.RESET)

try:

user = getpass.getuser()

print(Fore.YELLOW+'Hello •\_•',user,'\n')

usr=input("USER-NAME: ")

passwd=getpass.getpass(prompt="PASSWORD: ")

host ='localhost'

co(host,usr,passwd)

cursor=con.cursor()

print(Fore.CYAN+'\nCONNECTION SUCCESSFUL\n')

d=input('Enter Your Database Name: ')

try:

co(host,usr,passwd,d)

print(f'{d} database is exsit')

except:

print('Database is not exsit')

db=input('Do you want to create(y/n): ')

if db == 'y':

cursor.execute(f'create database {d}')

print(f'{d} database created')

else:

eval('exit()')

os.system('clear')

break

except Exception as e:

print(Fore.RESET,Fore.RED)

os.system('clear')

print('ERORR: '+str(e))

print('\nCONNECTION UNSUCCESSFUL')

print('Try Again\n')

co(host,usr,passwd,d)

cursor=con.cursor()

cursor.execute(f"create table if not exists {time}(Roll\_No int primary key,Name varchar(200),Attendence varchar(200) not null default 'Absent')")

for i in col[1:]:

nam=c[int(i)]

cursor.execute(f"insert into {time}(Roll\_No,Name) values('{i}','{nam}')")

con.commit()

os.system('clear')

def Help():

print(Fore.GREEN + "=> For exit type 'exit()'\n=> To see all list of student type 'show()' ")

print("=> To clear type 'clear()' ")

print("=> For help type 'help()' ")

if Q==2:

print("=> To see attendence type 'table()' for mysql only")

Help()

print('\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*')

while True:

print('\n Present',count,' Absent',len(col)-1-count,' Total=',len(col)-1)

print(' ')

a=input(enter).title()

print(' ')

if l.count(a)==0:

try:

if a == 'Clear()':

os.system('clear')

elif a== 'Help()':

info()

eval(a)

elif a == 'Table()':

cursor.execute(f'select \* from {time}')

print\_t(cursor)

elif a == 'Show()':

print(tab)

elif a=='Exit()':

break

elif c[1:].count(a)>0 or col[1:].count(int(a))>0 :

l.append(a)

n=dict(zip(col,c))

try:

a=int(a)

print(' ',n[a],'is mark present')

count=count+1

except:

a=str(a)

print(' ',a,'is mark present')

count=count+1

if Q==1:

a=int(a)

try:

excel\_sheet.cell(row=a+1, column=m\_col).value ='Present'

excel\_sheet.cell(row=a+1, column=m\_col).fill=PatternFill('solid',fgColor='00FF00')

excel\_file.save(file)

except:

s.write(a,x-1,'present')

wb.save(file)

if Q==2:

a=int(a)

print('mysql......')

cursor.execute(f"update {time} set Attendence = 'Present' where Roll\_No = {a}")

con.commit()

else:

print('\nNot found')

except:

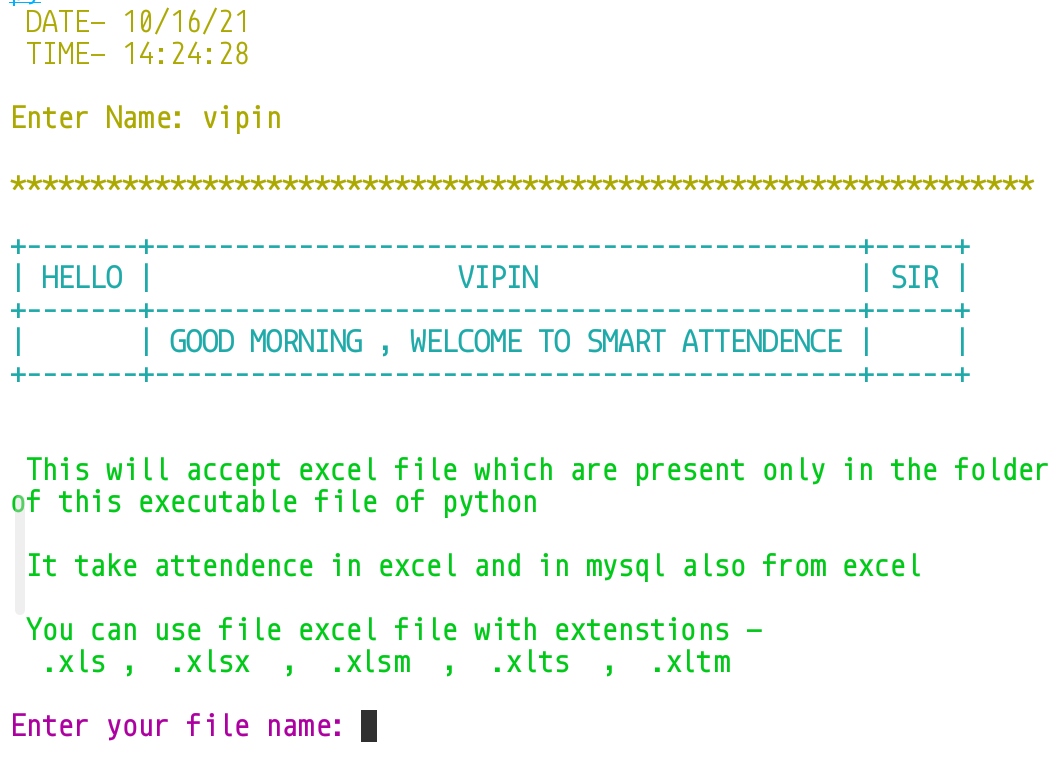
print('\nError found ')

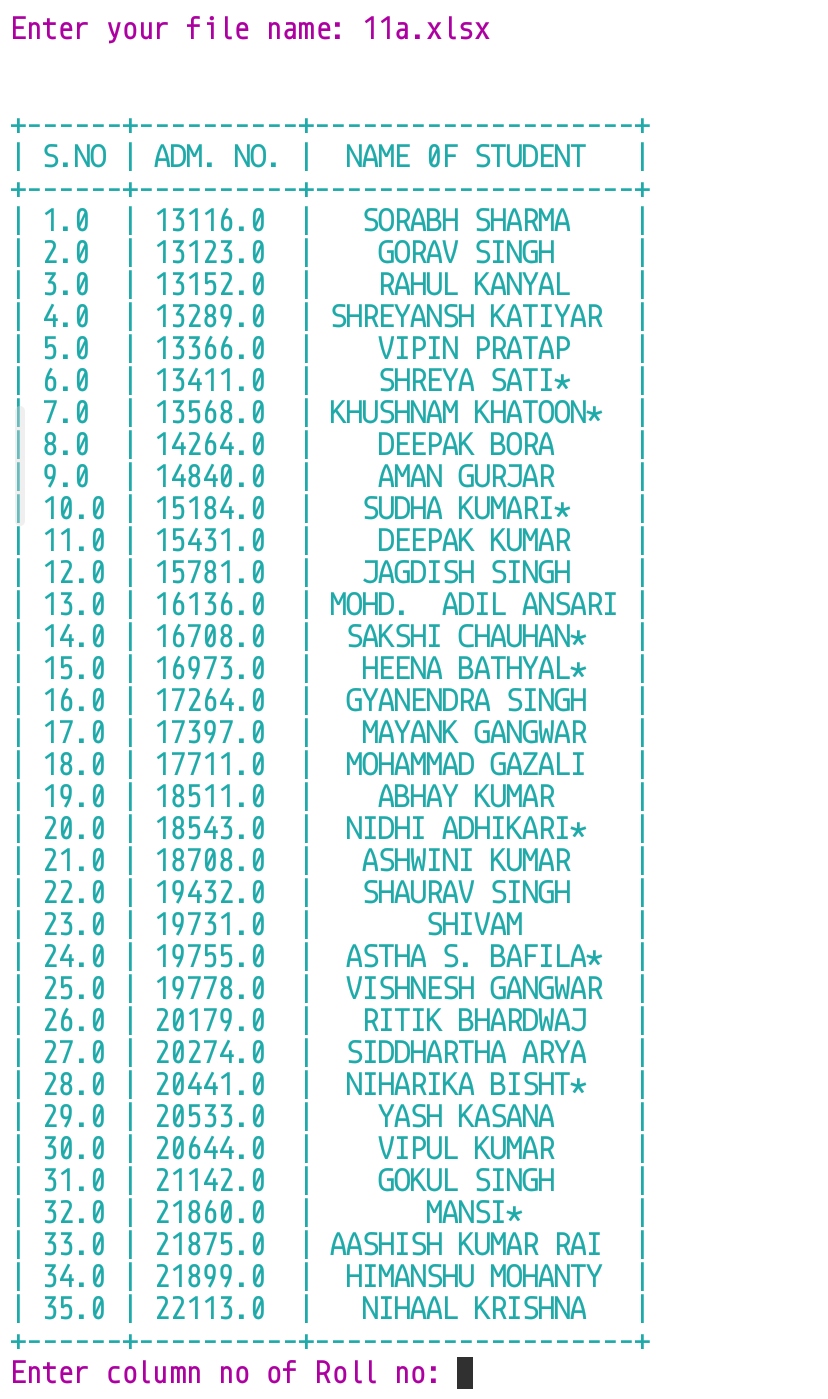
else:

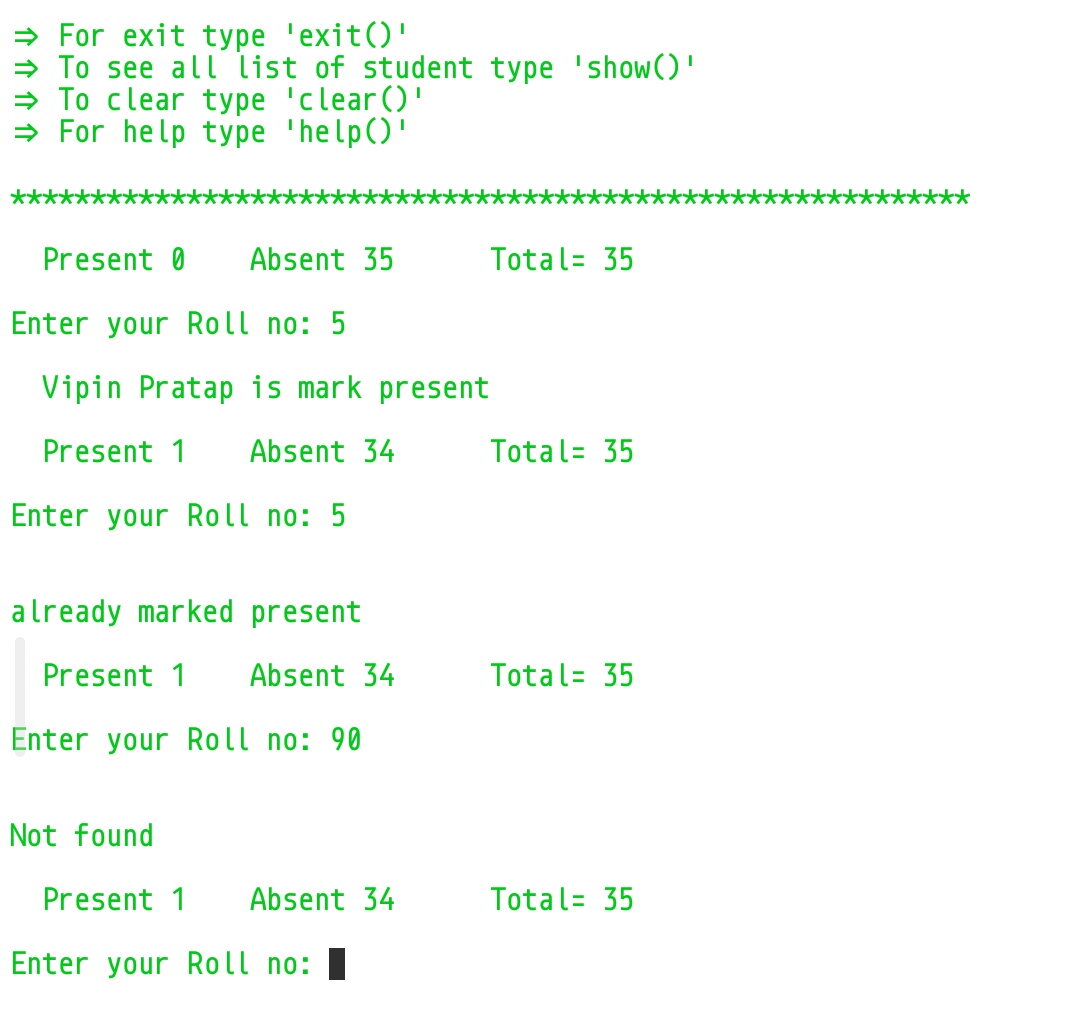
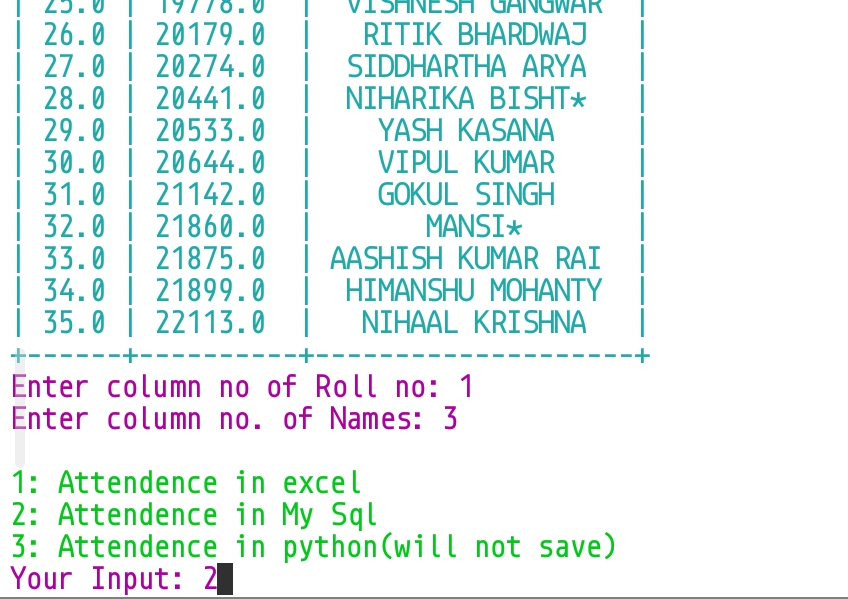
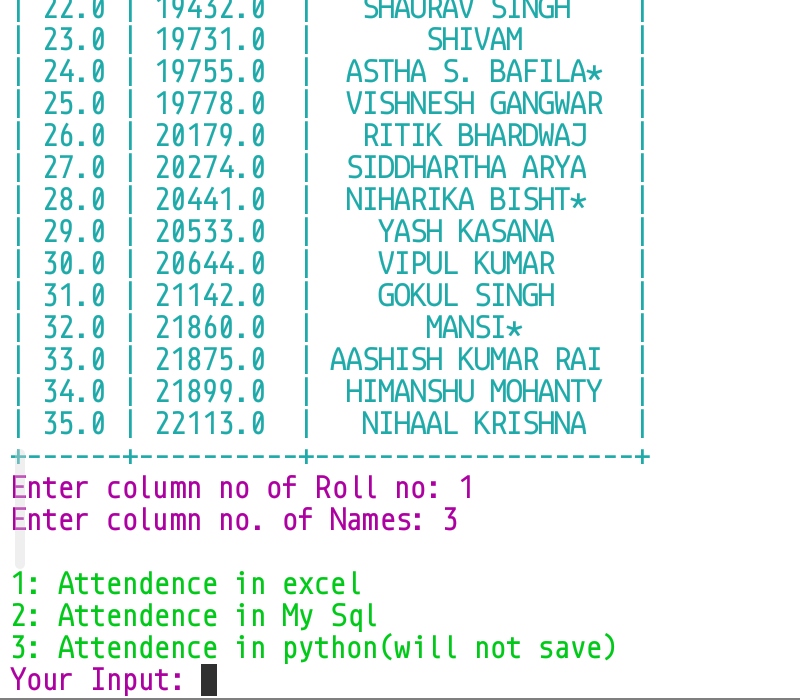
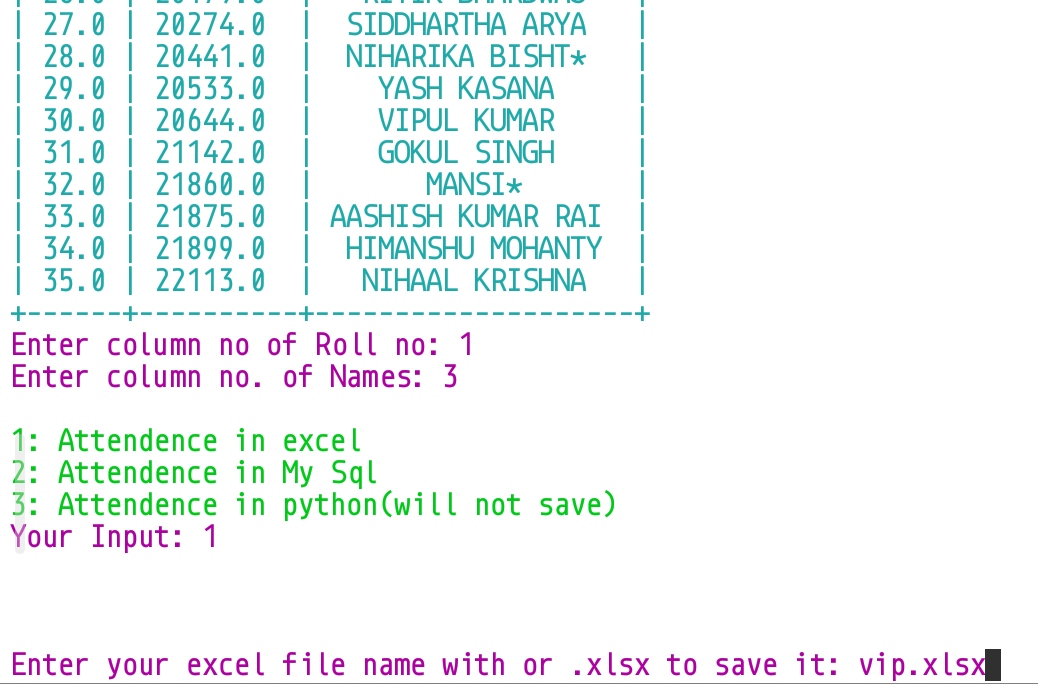
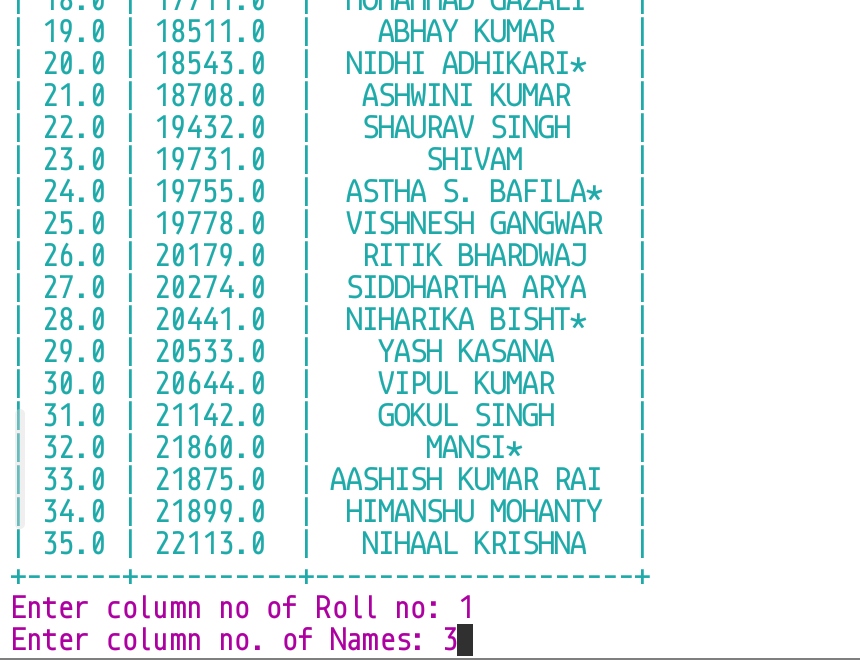
print('\nalready marked present')

print('Thank you have a nice day')

**OUTPUT :-**







**REFERENCE**

* Computer Science with Sumita Arora
* www.stackoverflow.com
* www.w3school.com