

COMSATS University Islamabad

Attock Campus



Department Of Computer Science

Course	AICT (CSC101)
Instructor	Sir Umar Zia
Assignment No.	03
Project Title	Faith Public School

Group Members Details

Registration No.	Name
FA23-BAI-020	Ahsan Hayat
FA23-BAI-042	Fassi-ur-Rehman
FA23-BAI-058	Ali Turab
FA23-BAI-023	M. Usman
FA23-BAI-014	Shaiman Akbar

faith public school.py X

```
#Project_Name: Faith Public School
#Assignment_no 3
print("Module 1: Students")
print("Module 2: Teachers")
print("Module 3: Fee Department")
print("Module 4: Library")
print("Module 5: Canteen")
module=int(input("Enter the module you want to run:"))
if module==1:
    #code of student module
elif module==2:
    #code of teacher module
elif module==3:
    #code of fee module
elif module==4:
    #code of library module
elif module==5:
    #code of canteen module
else
    #code
```

MODULE 1

CODE:

```
#Name=Syed Ali Turab Mehdi
#Reg_No.=FA23-BAI-058
#Assignment NO. 04
# Lists to store student data
names = []
marks = []
grades = []

n = int(input("Enter the number of subjects: "))
i = 0

while i < n:
    student_name = input("Enter the name of student: ")
    names.append(student_name)
    student_marks = float(input("Enter the marks: "))
    marks.append(student_marks)
    if student_marks >= 80:
        grade = "A+"
    elif student_marks >= 70:
        grade = "A"
    elif student_marks >= 60:
        grade = "B"
    elif student_marks >= 50:
        grade = "C"
    elif student_marks >= 40:
        grade = "D"
```

else:

grade="F"

grades.append(grade)

i = i + 1

print(list(zip(names, marks, grades)))

```
1 #Name=Syed Ali Turab MehdI
2 #Reg_No.=FA23-BAI-858
3 #Assignment No. 04
4 # Lists to store student data
5 names = []
6 marks = []
7 grades = []
8
9 n = int(input("Enter the number of subjects: "))
10 i = 0
11
12 while i < n:
13     student_name = input("Enter the name of student: ")
14     names.append(student_name)
15     student_marks = float(input("Enter the marks: "))
16     marks.append(student_marks)
17     if student_marks >= 80:
18         grade = "A+"
19     elif student_marks >= 70:
20         grade = "A"
21     elif student_marks >= 60:
22         grade = "B"
23     elif student_marks >= 50:
24         grade = "C"
25     elif student_marks >= 40:
26         grade = "D"
27     else:
28         grade = "F"
29     grades.append(grade)
30     i = i + 1
31
32 print(list(zip(names, marks, grades)))
33
```

OUTPUT:

```
In [1]: runfile('C:/Users/pc/Assignment No.04(AICT).py', wdir='C:/Users/pc')
Enter the number of subjects: 2
Enter the name of student: ali
Enter the marks: 79
Enter the name of student: Haider
Enter the marks: 81
[('ali', 79.0, 'A'), ('Haider', 81.0, 'A+')]

In [2]:
```

MODULE 2

CODE:

```
#Module 2
#Teachers
#M.Fassi Ur Rehman
#FA23-BAI-042
```

```
#these two lists in which the data is entered by user
teachers_id=[]
Salaries=[]
```

```
#these two lists in which data is entered by the above two lists
```

```
Taxes=[]
annual_salaries=[]
no_of_teachers= int(input("Enter number of teachers:"))
i=0
while i in range (no_of_teachers):
    teacher_id=input("enter the id of teacher:")
    teachers_id.append(teacher_id)
    salary = int(input("Enter Salary :"))
    Salaries.append(salary)
    tax=salary*.25
    Taxes.append(tax)
    annual_salary=salary*12-tax*12
    annual_salaries.append(annual_salary)
    i=i+1
print("[id-salary-tax-annual salary]")
#now the code will print the teacher's id their tax and salary of year
print(list(zip(teachers_id,Salaries,Taxes,annual_salaries)))
```

Output:

```
AICT ASSIMNT 04.py X
#Module 2
#Teachers
#M.Fassi Ur Rehman
#FA23-BAI-042

#these two lists in which the data is entered by user
teachers_id=[]
Salaries=[]

#these two lists in which data is entered by the above two lists
Taxes=[]
annual_salaries=[]
no_of_teachers= int(input("Enter number of teachers:"))
i=0
while i in range (no_of_teachers):
    teacher_id=input("enter the id of teacher:")
    teachers_id.append(teacher_id)
    salary = int(input("Enter Salary :"))
    Salaries.append(salary)
    tax=salary*.25
    Taxes.append(tax)
    annual_salary=salary*12-tax*12
    annual_salaries.append(annual_salary)
    i=i+1
print("[id-salary-tax-annual salary]")
#now the code will print the teacher's id their tax and salary of year
print(list(zip(teachers_id,Salaries,Taxes,annual_salaries)))
```

```
Python 3.8.10 (tags/v3.8.10:3d8993a, May 3 2021, 11:48:03) [MSC v.1928 64
bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 8.12.3 -- An enhanced Interactive Python.

In [1]: runfile('C:/Users/toshiba/Desktop/AICT ASSIMNT 04.py', wdir='C:/
Users/toshiba/Desktop')
Enter number of teachers:3
enter the id of teacher:de987
Enter Salary :100000
enter the id of teacher:wr555
Enter Salary :65000
enter the id of teacher:qu723
Enter Salary :75000
[id-salary-tax-annual salary]
[('de987', 100000, 25000.0, 900000.0), ('wr555', 65000, 16250.0, 585000.0),
('qu723', 75000, 18750.0, 675000.0)]
```

MODULE 3

CODE:

```
print("Fee Department")
# Project_Name:("Faith_Public_School")
# Module_Name:("Fee Department")
# Name:Malik_Ahsan_Hayat
# Reg_NO.:FA23-BAI-020
# For login in fee department
username = input("Enter your Username :")
password = input("Enter your password :")

while username!="admin" or password!="admin":
    print("invalid ")
    username = input("Enter your Username :")
    password = input("Enter your password :")

print("Valid")

student_name = input("Enter the name of Student:")
roll_no = input("Enter roll no of the student:")
Class = input("Class:")

student= []
class_name = []
number_of_student = int(input("Enter number of students: "))
for i in range(0, number_of_student):
    studentVar = input("Enter Your Name of student: ")
    student.append(studentVar)
    class_nameVar = int(input("Enter Your Class: "))
    class_name.append(class_nameVar)

print(student_name)
print(class_name)
```

```
print("Fee Department")
# Project_Name:("Faith_Public_School")
# Module_Name:("Fee Department")
# Name:Malik_Ahsan_Hayat
# Reg_NO.:FA23-BAI-020
# For login in fee department
username = input("Enter your Username :")
password = input("Enter your password :")

while username!="admin" or password!="admin":
    print("invalid ")
    username = input("Enter your Username :")
    password = input("Enter your password :")

print("Valid")

student_name = input("Enter the name of Student:")
roll_no = input("Enter roll no of the student:")
Class = input("Class:")

student= []
class_name = []
number_of_student = int(input("Enter number of students: "))
for i in range(0, number_of_student):
    studentVar = input("Enter Your Name of student: ")
    student.append(studentVar)
```

```
studentVar = input("Enter Your Name of student: ")
student.append(studentVar)
class_nameVar = int(input("Enter Your Class: "))
class_name.append(class_nameVar)

print(student_name)
print(class_name)
```

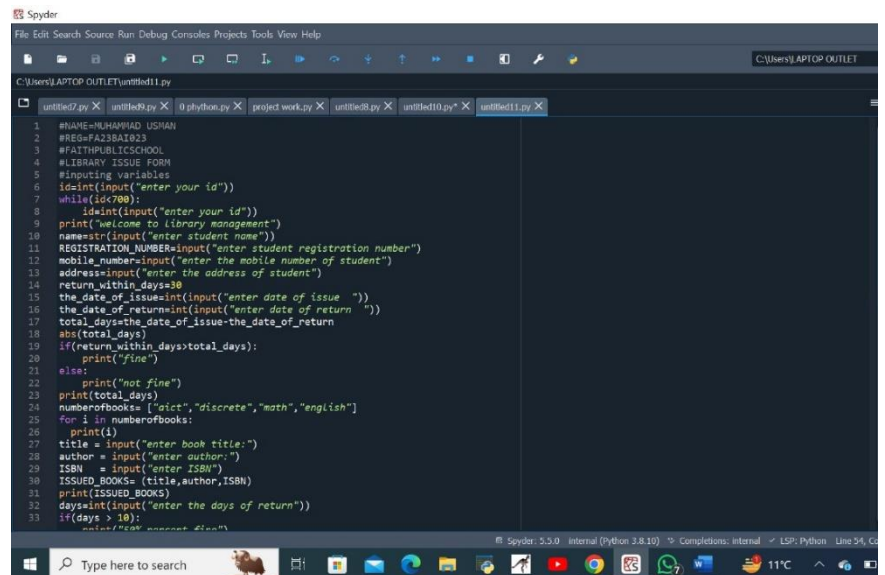
OUTPUT:

```
In [1]: runfile('C:/Users/user/untitled11.py', wdir='C:/Users/user')
Fee Department
Enter your Username :admin
Enter your password :admin
Valid
Enter the name of Student:ali
Enter roll no of the student:12
Class:11
Enter number of students: 2
Enter Your Name of student: ali
Enter Your Class: 3
Enter Your Name of student: ahmed
Enter Your Class: 3
ali
[3, 3]
```


MODULE 4

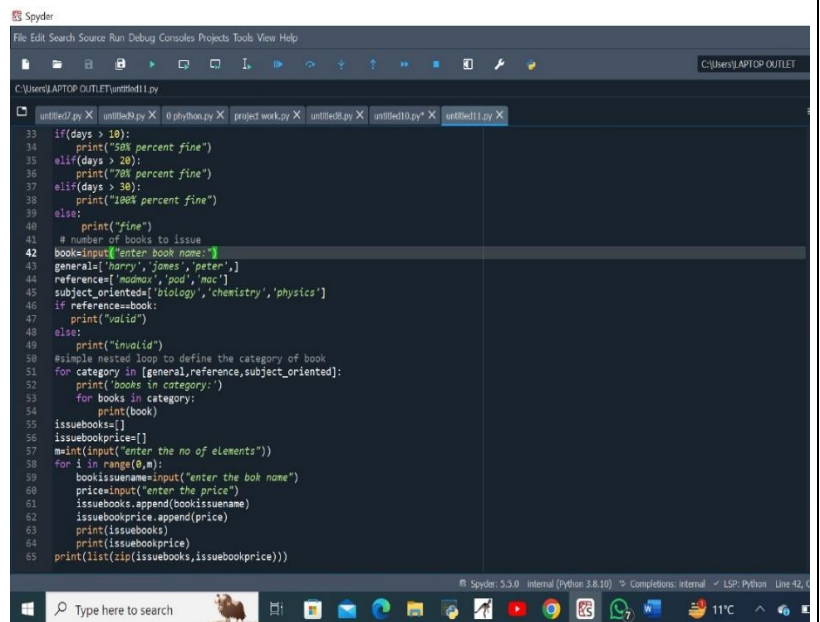
CODE:

```
#NAME=MUHAMMAD USMAN
#REG=FA23BAI023
#FAITHPUBLICSCHOOL
#LIBRARY ISSUE FORM
#inputing variables
id=int(input("enter your id"))
while(id<700):
    id=int(input("enter your id"))
print("welcome to library management")
name=str(input("enter student name"))
REGISTRATION_NUMBER=input("enter
student registration number")
mobile_number=input("enter the mobile number of student")
address=input("enter the address of student")
return_within_days=30
the_date_of_issue=int(input("enter date of issue "))
the_date_of_return=int(input("enter date of return "))
total_days=the_date_of_issue-the_date_of_return
abs(total_days)
if(return_within_days>total_days):
    print("fine")
else:
    print("not fine")
print(total_days)
numberofbooks= ["aict","discrete","math","english"]
for i in numberofbooks:
    print(i)
title = input("enter book title:")
author = input("enter author:")
ISBN = input("enter ISBN")
ISSUED_BOOKS= (title,author,ISBN)
print(ISSUED_BOOKS)
days=int(input("enter the days of return"))
if(days > 10):
    print("50% percent fine")
elif(days > 20):
    print("70% percent fine")
elif(days > 30):
    print("100% percent fine")
else:
    print("fine")
# number of books to issue
book=input("enter book name:")
general=['harry','james','peter',]
reference=['madmax','pod','mac']
subject_oriented=['biology','chemistry','physics']
if reference==book:
    print("valid")
else:
    print("invalid")
```



```
#simple nested loop to define the category of book
for category in [general,reference,subject_oriented]:
    print('books in category:')
    for books in category:
        print(book)
issuebooks=[]
issuebookprice=[]
m=int(input("enter the no of elements"))
for i in range(0,m):
    bookissuename=input("enter the bok name")
    price=input("enter the price")
    issuebooks.append(bookissuename)
    issuebookprice.append(price)
    print(issuebooks)
    print(issuebookprice)
print(list(zip(issuebooks,issuebookprice)))
```

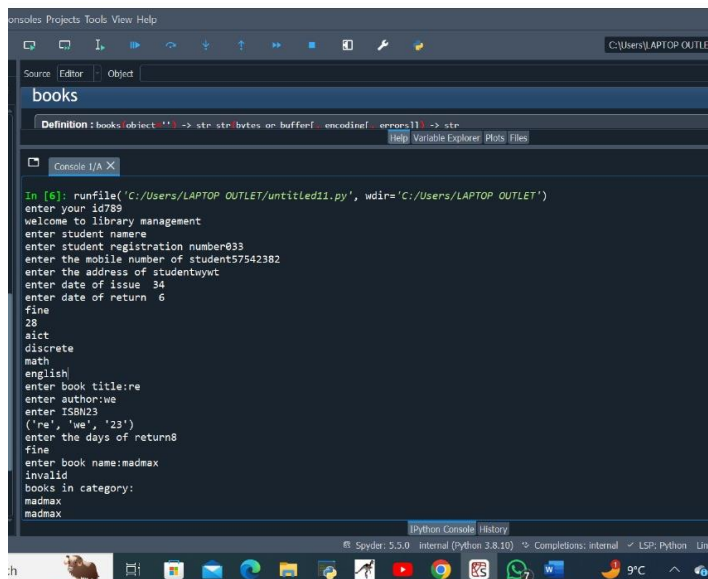
OUTPUT:



```

33 if(days > 10):
34     print("50% percent fine")
35 elif(days > 20):
36     print("70% percent fine")
37 elif(days > 30):
38     print("100% percent fine")
39 else:
40     print("fine")
41 # number of books to issue
42 bookinput="Enter book name:"
43 general=['harry','james','peter']
44 reference=['madmax','pad','mac']
45 subject_oriented=['biology','chemistry','physics']
46 if reference==book:
47     print("valid")
48 else:
49     print("invalid")
50 #simple nested loop to define the category of book
51 for category in [general,reference,subject_oriented]:
52     print('books in category:')
53     for books in category:
54         print(book)
55     issuebooks=[]
56     issuebookprice=[]
57     m=int(input("enter the no of elements"))
58     for i in range(0,m):
59         bookissuename=input("enter the bok nome")
60         price=input("enter the price")
61         issuebooks.append(bookissuename)
62         issuebookprice.append(price)
63         print(issuebooks)
64         print(issuebookprice)
65     print(list(zip(issuebooks,issuebookprice)))

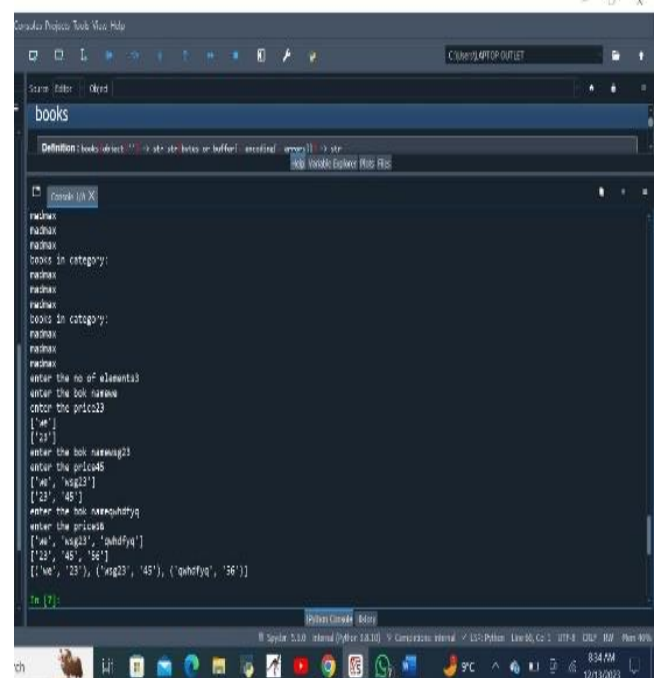
```



```

In [6]: runfile('C:/Users/LAPTOP OUTLET/untitled11.py', wdir='C:/Users/LAPTOP OUTLET')
enter your id:789
welcome to library management
enter student name:re
enter student registration number:833
enter the mobile number of student:57542382
enter the address of student:wywt
enter date of issue: 34
enter date of return: 6
fine
28
aict
discrete
math
english
enter book title:re
enter author:ve
enter isbn:23
('re', 've', '23')
enter the days of return:8
fine
enter book name:madmax
invalid
books in category:
madmax
madmax

```



```

books in category:
books in category:
books in category:
enter the no of elements:3
enter the book name:
enter the price:23
['re', 've', '23']
enter the book name:arg23
enter the price:45
['arg23', 'qahdfyg']
enter the book name:qahdfyg
enter the price:56
['ve', '23', ('arg23', '45'), ('qahdfyg', '56')]
In [2]:

```


MODULE 5

CODE:

```
# Name: Shaiman Akbar Ehsan
# Reg: 014
choice=str(input("Enter Choice: 1-products 2-customers "))
if choice=="1":
    name=[]
    age=[]
    Id=[]
    num = int(input("Enter num of customer : "))
    for i in range(0,num):
        nameVar = input("Enter Your Name :")
        name.append(nameVar)
        ageVar = int(input("Enter Your Age :"))
        age.append(ageVar)
        IdVar = int(input("Enter Your Id :"))
        Id.append(IdVar)
    print(name)
    print(age)
    print(Id)
    items=["samoosa","juice","burger","tea"]
```

```
w=["macroni_samoosa","keema_samoosa","chicken_samoosa"]
x=["apple_juice","orange_juice","pineapple_juice"]
y=["zinger_burger","turkey_burger","veggie_burger"]
z=["kashmiri_tea","black_tea","herbal_tea"]
for item in range(1):
```

```
    print("samoosa: ",end="\n ")
    for a in w:
        print(a,end="\n")
    print(" ")
    print("juice: ",end="\n ")
    for b in x:
        print(b,end="\n")
    print(" ")
    print("burger: ",end="\n ")
    for c in y:
        print(c,end="\n")
    print(" ")
    print("tea: ",end="\n ")
    for d in z:
        print(d,end="\n")
    print(" ")
```

```
while choice.lower() != "exit":
    choice = input("Enter Choice: 1-products 2-customers (type 'exit' to end): ")

    if choice == "1":
        # Your code for handling products
        items = ["samoosa", "juice", "burger", "tea"]
        # ... (rest of your product handling code)

    elif choice == "2":
        # Your code for handling customers
        product_id = int(input("Enter the product id: "))
        product_name = input("Enter the product name: ")
        # ... (rest of your customer handling code)

    elif choice.lower() != "exit":
        print("Invalid choice. Please enter 1, 2, or 'exit'.")

    elif choice=="2" :
        product_id = int(input("Enter the product id: "))
        product name = input("Enter the product name: ")
```

```
# Name: Shaiman Akbar Ehsan
# Reg: 014
choice=str(input("Enter Choice: 1-products 2-customers "))
if choice=="1":
    name=[]
    age=[]
    Id=[]
    num = int(input("Enter num of customer : "))
    for i in range(0,num):
        nameVar = input("Enter Your Name :")
        name.append(nameVar)
        ageVar = int(input("Enter Your Age :"))
        age.append(ageVar)
        IdVar = int(input("Enter Your Id :"))
        Id.append(IdVar)
    print(name)
    print(age)
    print(Id)
    items=["samoosa","juice","burger","tea"]

w=["macroni_samoosa","keema_samoosa","chicken_samoosa"]
```

```
x=["apple_juice","orange_juice","pineapple_juice"]
y=["zinger_burger","turkey_burger","veggie_burger"]
z=["kashmiri_tea","black_tea","herbal_tea"]
for item in range(1):
    print("samoosa: ",end="\n ")
    for a in w:
        print(a,end="\n")
    print(" ")
    print("juice: ",end="\n ")
    for b in x:
        print(b,end="\n")
    print(" ")
    print("burger: ",end="\n ")
    for c in y:
        print(c,end="\n")
    print(" ")
    print("tea: ",end="\n ")
    for d in z:
        print(d,end="\n")
    print(" ")
```

```
while choice.lower() != "exit":
    choice = input("Enter Choice: 1-products 2-customers (type 'exit' to end): ")

    if choice == "1":
        # Your code for handling products
        items = ["samoosa", "juice", "burger", "tea"]
        # ... (rest of your product handling code)

    elif choice == "2":
        # Your code for handling customers
        product_id = int(input("Enter the product id: "))
        product_name = input("Enter the product name: ")
        # ... (rest of your customer handling code)

    elif choice.lower() != "exit":
        print("Invalid choice. Please enter 1, 2, or 'exit'.")

    elif choice=="2" :
        product_id = int(input("Enter the product id: "))
        product name = input("Enter the product name: ")
```

```

product_id = int(input("Enter the product id: "))
product_name = input("Enter the product name: ")
# ... (rest of your customer handling code)

```

```

elif choice.lower() != "exit":
    print("Invalid choice. Please enter 1, 2, or 'exit'.")

```

```

elif choice=="2" :
    product_id = int(input("Enter the product id: "))
    product_name = input("Enter the product name: ")
    product_price = int(input("Enter the product selling price: "))
    cost_price = int(input("Enter the product cost price: "))
    unit = int(input("Enter the unit: "))
    total_sales = unit * product_price
    total_cost = unit * cost_price
    profit_loss = total_sales - total_cost

```

```

print("Product ID:", product_id)
print("Product Name:", product_name)
print("Product Selling Price:", product_price)
print("Cost Price:", cost_price)
print("Unit:", unit)
print("Total Sales:", total_sales)
print("Total Cost:", total_cost)

```

```

if profit_loss > 0:
    print("Profit:", profit_loss)
elif profit_loss < 0:
    print("Loss:", -profit_loss)
else:
    print("No Profit, No Loss")

```

```

if profit_loss > 0:
    print("Profit:", profit_loss)
elif profit_loss < 0:
    print("Loss:", -profit_loss)
else:
    print("No Profit, No Loss")

```

OUTPUT:

```

In [1]: runfile('C:/Users/user/.spyder-py3/temp.py', wdir='C:/Users/user/.spyder-py3')
Enter Choice: 1-products 2-customers 1
Enter num of customer : 1
Enter Your Name :shymoon
Enter Your Age :55
Enter Your Id :12
['shymoon']
[55]
[12]
samoosa:
macroni_samoosa
keema_samoosa
chicken_samoosa

juice:
apple_juice
orange_juice
pineapple_juice

burger:
zinger_burger
turkey_burger
veggie_burger

```

```

tea:
kashmiri_tea
black_tea
herbal_tea

Enter Choice: 1-products 2-customers (type 'exit' to end): 1
Enter Choice: 1-products 2-customers (type 'exit' to end): 2
Enter the product id: 12
Enter the product name: uyghd
Enter Choice: 1-products 2-customers (type 'exit' to end): exit

In [2]: runfile('C:/Users/user/.spyder-py3/temp.py', wdir='C:/Users/user/.spyder-py3')
Enter Choice: 1-products 2-customers 2
Enter the product id: 34
Enter the product name: juice
Enter the product selling price: 45
Enter the product cost price: 40
Enter the unit: 1
Product ID: 34
Product Name: juice
Product Selling Price: 45
Cost Price: 40
Unit: 1
Total Sales: 45
Total Cost: 40
Profit: 5

```