Submission-1

COLLEGE OF ENGINEERING
(AUTONOMOUS)

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Roll no: 323103310032

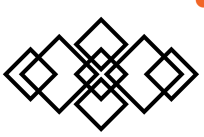
Branch: CSE-1

Semistor: 3

Name of the lab: Adv Python lab

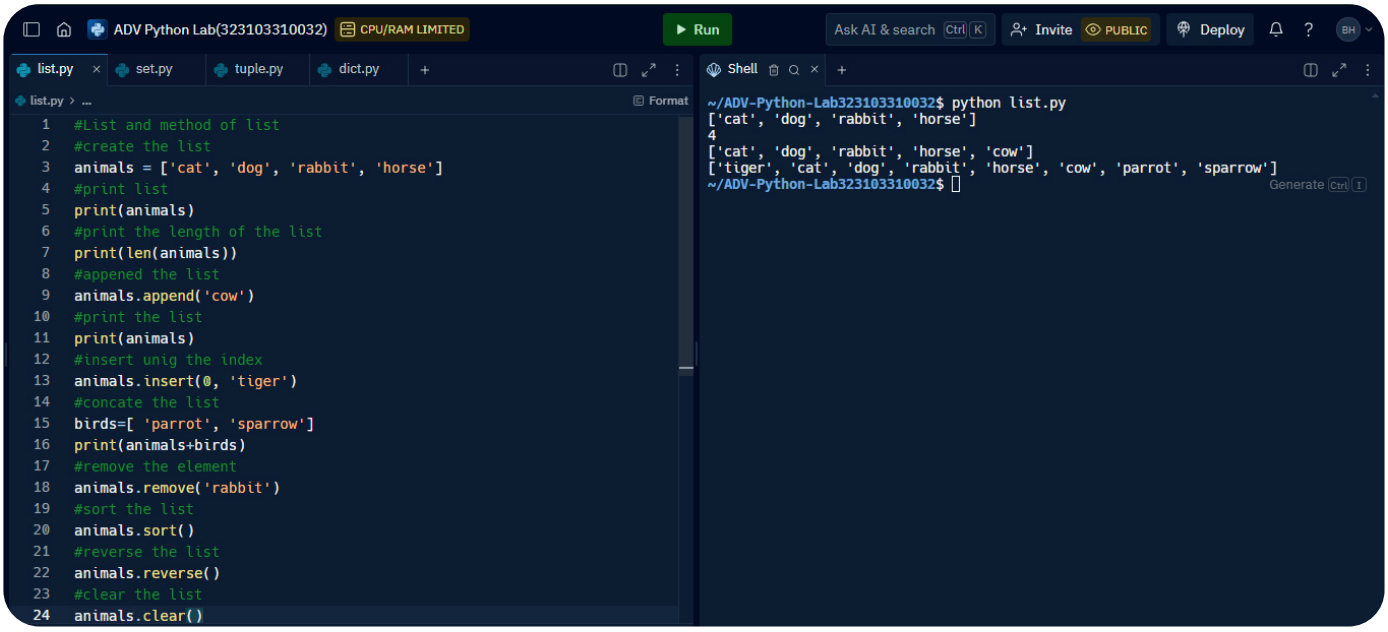
Professor: Satya Keerthi Gorripati

Links:

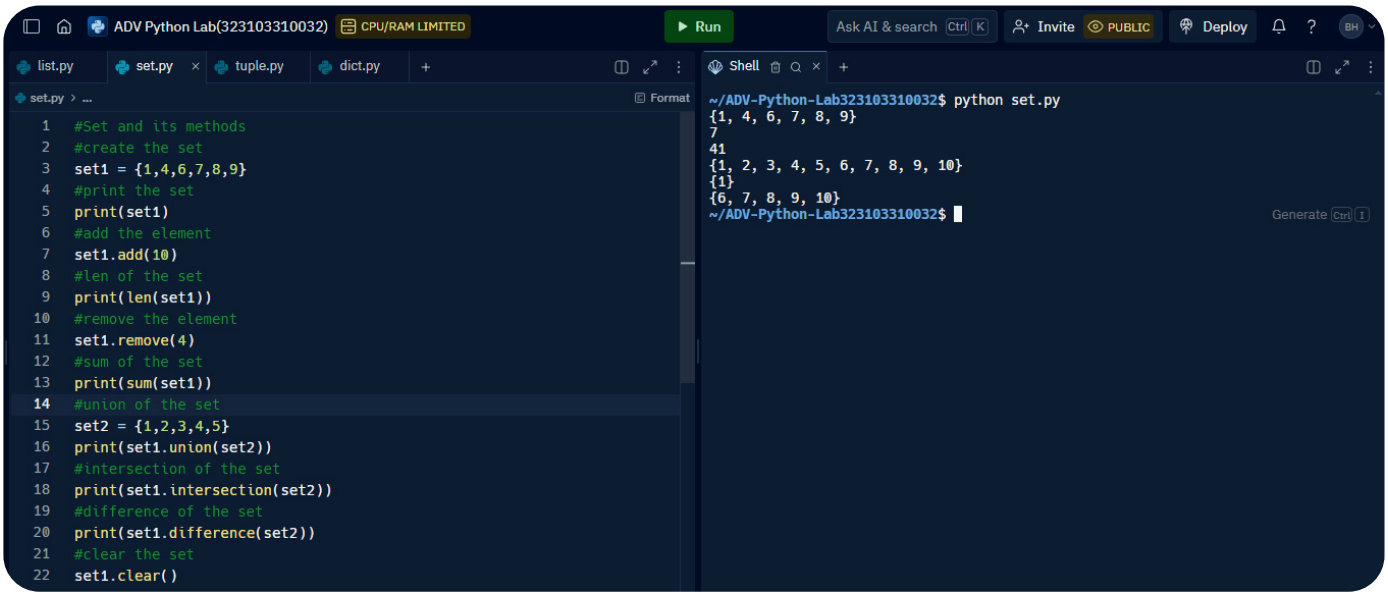


Week0:

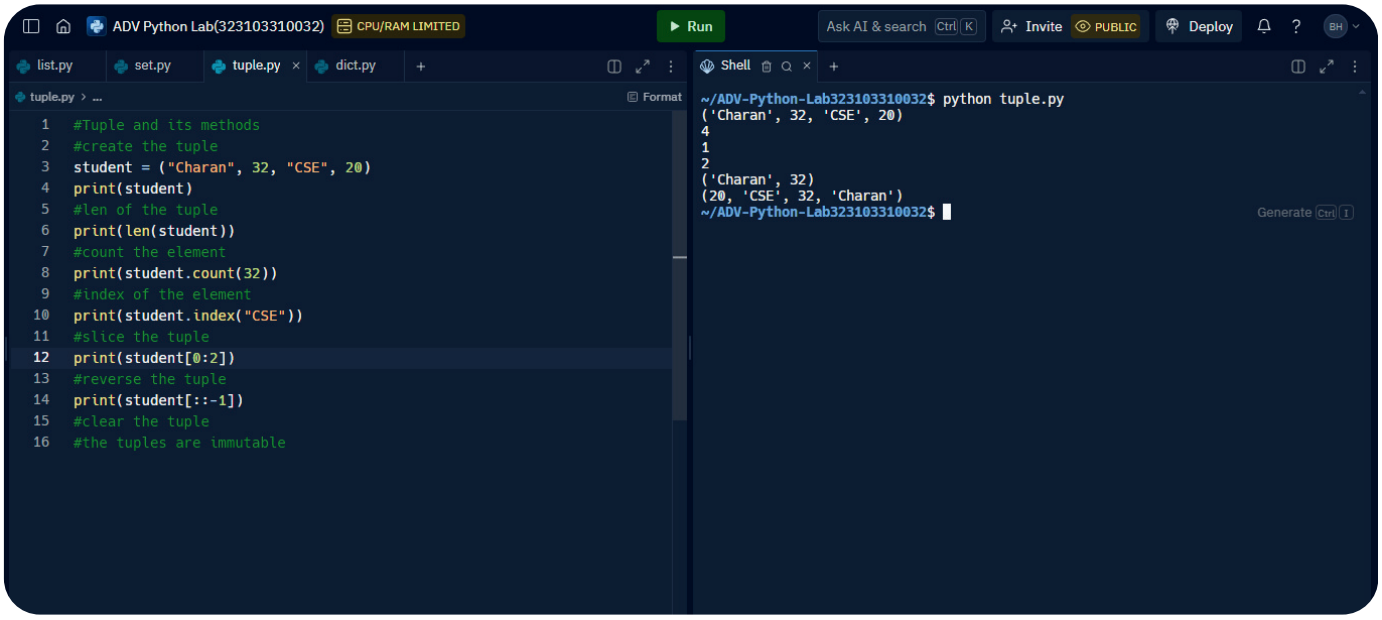
Lists



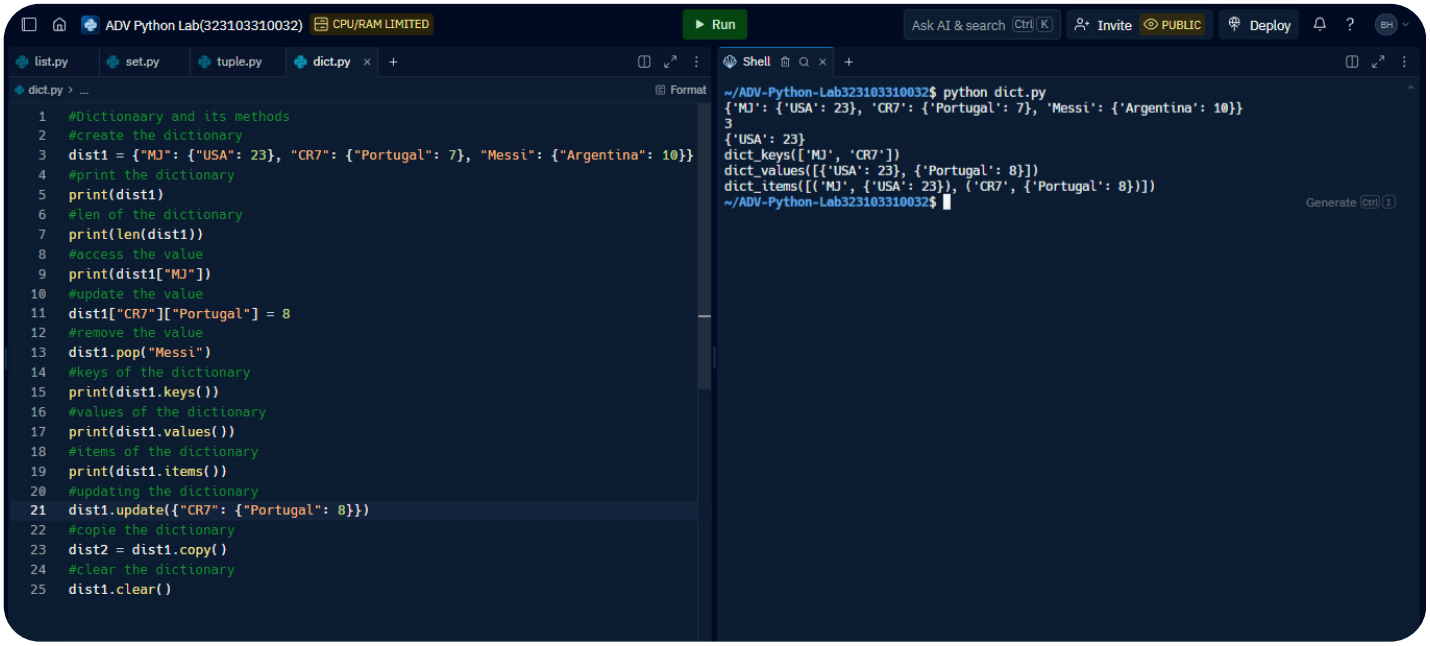
Sets:



Tuple:



Dictionary:



Week1

Exception Handling:

exception.py 1 | expEntry.py | expAge.py

python > Week1 > exception.py > ...

```python
#ValuError
try:
    x=int("Python")
    y="Hello"
    print(x+y)

except ValueError:
    print("ValueError Found")

#IndexError
try:
    arr=[2,3,4,5,6]
    print(arr[7])

except IndexError:
    print("Index Error")

#NameError
try:
    Q=10
    print(q)


except NameError:
    print("NameError handled")

#ZeroDivisionError
try:
    x=5
```

exception.py 1

python > Week1 > exception.py > ...

```python

#NameError
try:
    Q=10
    print(q)


except NameError:
    print("NameError handled")

#ZeroDivisionError
try:
    x=5
    y=x/0
    print(y)

except ZeroDivisionError:
    print("ZeroDevisionError found")

#TypeError
try:
    x=5
    s="Hello"
    print(x+s)

except TypeError:
    print("TypeValue Error")

```

PROBLEMS 1 | OUTPUT | DEBUG CONSOLE | TERMINAL | PORTS | COMMENTS

powershell - week1

```
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week1> python exception.py
ValueError Found
Index Error
NameError handled
ZeroDevisionError found
TypeValue Error
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week1>
```

exception.py 1 | expEntry.py | expAge.py

python > Week1 > expAge.py > ...

```python
class InvalidAge(Exception):
    pass
age = int(input("Enter your age(Years): "))
if age<0:
    raise InvalidAge("Invalid Age")
elif age < 18:
    raise InvalidAge("You are not eligible to Vote")
else:
    print("You are eligible to Vote")

```

PROBLEMS 1 | OUTPUT | DEBUG CONSOLE | TERMINAL | PORTS | COMMENTS

powershell - week1

```
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week1> python expAge.py
Enter your age(Years): 19
You are eligible to Vote
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week1>
```

exception.py 1 | expEntry.py | expAge.py

python > Week1 > expEntry.py > ...

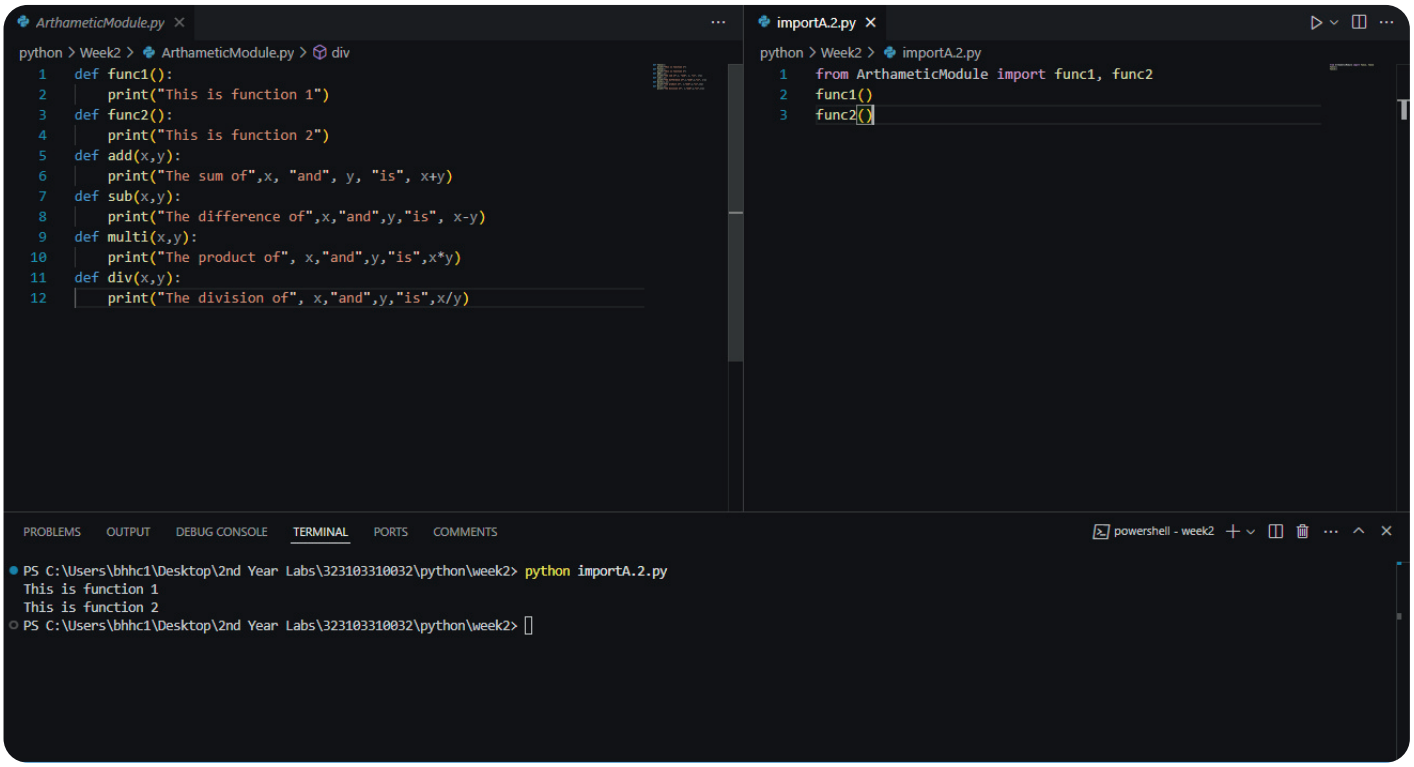
```python
class Course(Exception):
    pass
compu = ['CSE','CSM','CSD','IT']
roll = int(input("Enter roll number: "))
name = input("Enter your name: ")
branch = input("Enter your branch: ")
branch=branch.upper()
if branch in compu:
    print("Congratulations", name, ", you are Welcome to the world of computers")
else:
    raise Course("Students from non computers barnch are not allowed")
```

PROBLEMS 1 | OUTPUT | DEBUG CONSOLE | TERMINAL | PORTS | COMMENTS

powershell - week1

```
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week1> python expEntry.py
Enter roll number: 32
Enter your name: Charan
Enter your branch: cse
Congratulations Charan , you are Welcome to the world of computers
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week1>
```

Week2
Modules and Packages:



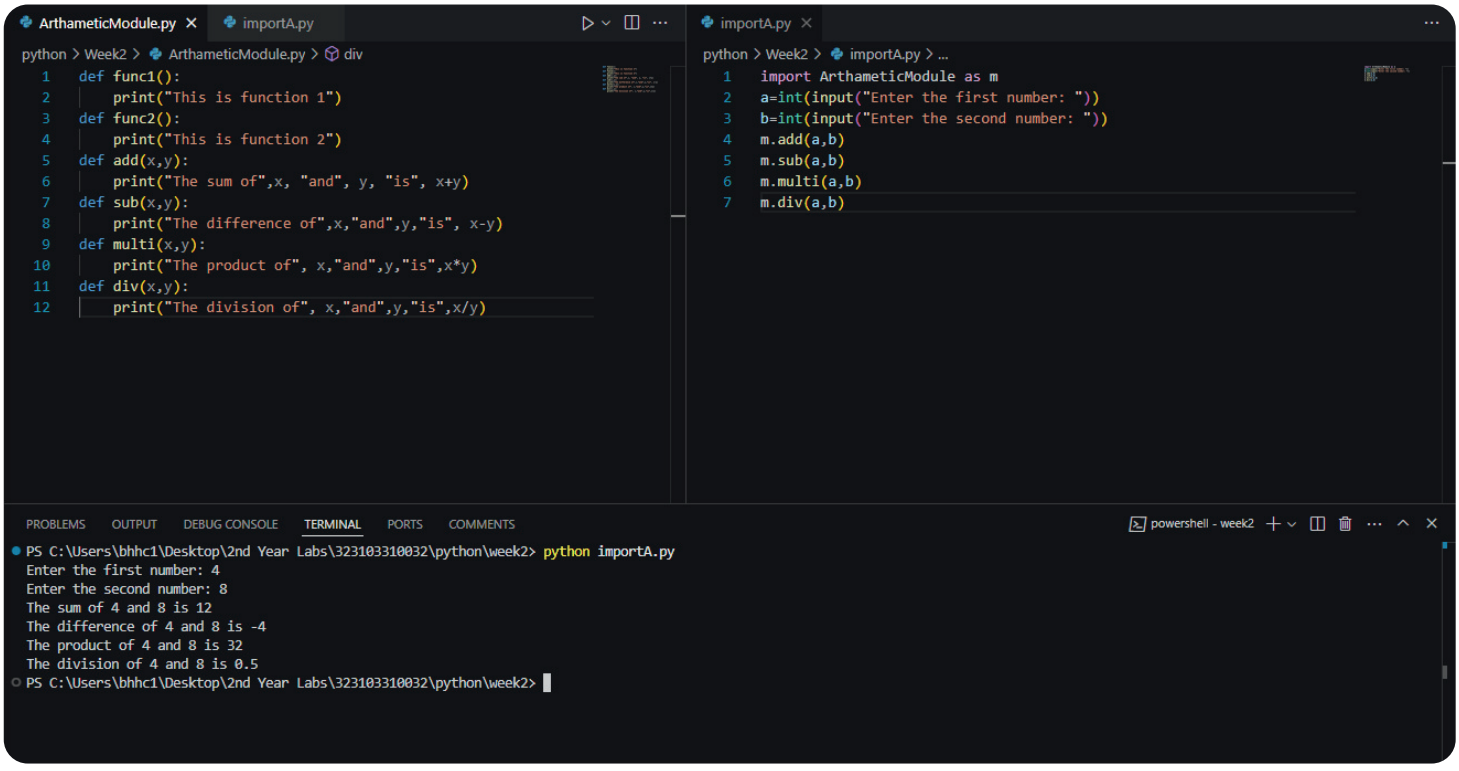
ArthameticModule.py

```
def func1():
    print("This is function 1")
def func2():
    print("This is function 2")
def add(x,y):
    print("The sum of",x, "and", y, "is", x+y)
def sub(x,y):
    print("The difference of",x,"and",y,"is", x-y)
def multi(x,y):
    print("The product of", x,"and",y,"is",x*y)
def div(x,y):
    print("The division of", x,"and",y,"is",x/y)
```

importA.2.py

```
from ArthameticModule import func1, func2
func1()
func2()
```

```
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week2> python importA.2.py
This is function 1
This is function 2
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week2>
```



ArthameticModule.py

```
def func1():
    print("This is function 1")
def func2():
    print("This is function 2")
def add(x,y):
    print("The sum of",x, "and", y, "is", x+y)
def sub(x,y):
    print("The difference of",x,"and",y,"is", x-y)
def multi(x,y):
    print("The product of", x,"and",y,"is",x*y)
def div(x,y):
    print("The division of", x,"and",y,"is",x/y)
```

importA.py

```
import ArthameticModule as m
a=int(input("Enter the first number: "))
b=int(input("Enter the second number: "))
m.add(a,b)
m.sub(a,b)
m.multi(a,b)
m.div(a,b)
```

```
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week2> python importA.py
Enter the first number: 4
Enter the second number: 8
The sum of 4 and 8 is 12
The difference of 4 and 8 is -4
The product of 4 and 8 is 32
The division of 4 and 8 is 0.5
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week2>
```

engg.py

```python
def stuDetails():

    roll = int(input("Enter your roll number: "))
    name = input("Enter your name: ")
    year = int(input("Enter your year of study: "))

    if year == 1:
        print(f"Welcome, {name}!")

    elif year == 2:
        print(f"Keep up the good work, {name}!")
    elif year == 3:
        print(f"Stay focused, {name}.")

    elif year == 4:
        print(f"Good luck with your placements, {name}!")
    else:
        print("Invalid year.")

project_list = []
def add_project():
    project = input("Enter the project name: ")
    project_list.append(project)
    print("Project successfully added.")

def display_projects():
    print("The projects are: ", project_list)

```

medicines.py

```python
def medicineDetais():
    medicine_name = input("Enter the medicine name: ")
    quantity = int(input("Enter the quantity available: "))
    expiry_year = int(input("Enter the expiry year: "))

    if expiry_year < 2024:
        print("Warning: This medicine is expired or close to expiry!")
    else:
        print("Medicine details are successfully added")

def display_medicines():
    medicine = input("Enter the medicine name: ")
    available_medicines = ["Crocin", "Paracetamol", "Dolo", "Aspirin", "

    if medicine not in available_medicines:
        print("This medicine is not available in this pharmacy.")
        print("The available medicines are: ", available_medicines)
    else:
        print("The medicine is available")
```

importB.py

```python
from Packages import engg, medicines

print("medicines Details:")
medicines.medicineDetais()

print("Medicine Display:")
medicines.display_medicines()

print("\nEngineering Details:")

print("Student Details:")
engg.stuDetails()

print("Project Details:")
engg.add_project()

print("Project Display:")
engg.display_projects()
```

```
PS C:\Users\bhhc1\Desktop\2nd Year Labs\323103310032\python\week2> python importB.py
medicines Details:
Enter the medicine name: Metaformin
Enter the quantity available: 100
Enter the expiry year: 2026
Medicine details are successfully added
Medicine Display:
Enter the medicine name: Dolo
The medicine is available

Engineering Details:
Student Details:
Enter your roll number: 32
Enter your name: Charan
Enter your year of study: 2
Keep up the good work, Charan!
Project Details:
Enter the project name: Facial_recognation
Project successfully added.
Project Display:
The projects are:  ['Facial_recognation']
```

Hari Hara charan