Assignment - 3

i) Student Management System (Function - Based)

```
students = []

def add_student (roll, name);
    students.append ([roll, name])

def modify_student (roll, new_name):
    for s in students:
    if s[0] == roll:
        s[1] = new_name

def display_students ():
    for s in students:
    print ("Roll:", s[0], "Name:", s[1])

add_student (1, "Amit")
add_student (2, "Neha")
modify_student (1, "Rahul")
display_students()
```

ii) College Management System (Module Based)

i) department.py

```
def add(name):
print ("Department Added:", name)
```

ii) main.py

```
import department

department.add("Computer")
```

3) Electronics Tools Management System (Package-Based)

i) inventory.py

```
def add_tool(name):
    print("Tool Added:", name)
```

ii) pricing.py

```
def price_tool(name, price):
    print("Tool:", name, "Price:", price)
```

iii) main.py

```
from tools_package.inventory import add_too
from tools_package.pricing import price_tool

add_tool("Multimeter")
price_tool("Multimeter", 1500)
```

4) Document Organizer (Numpy Based)

```
import numpy as np
docs = np.array([10, 20, 30, 40, 50])
print("Total size:", np.sum(docs))
print("Average size:", np.mean(docs))
print("Max size:", np.max(docs))
Print("Min size:", np.min(docs))
```

5) Calculator Application (Class Based)

```
class Calculator:

def __init__(self, a, b):
    self.a = a
    self.b = b

def add(self):
    return self.a + self.b

def sub(self):
    return self.a + - self.b

c = calculator(10, 5)

print("Addition:", c.add())
print("Subtraction:", c.sub())
```