

Assignment - 2

1) Student Management System (List - Based)

```
Code:  students = []
        students.append("Amit")
        students.append("Neha")
        print("Students:", students)

        students[1] = "Rahul"
        print("After Update:", students)

        students.remove("Amit")
        print("After delete:", students)

        print("Search Neha:", "neha in students")
```

2) College Management System Tuple - Based

```
College = ("ABC College", "Pune", ("ECE", "CSE", "MAA"))

print("College Name:", college[0])
print("Location:", college[1])
print("Courses:", college[2])
```

3.) Electric Tools Management System (Set - Based)

```
set1 = {"Resistor", "Capacitor", "Diode"}  
set2 = {"Diode", "Transistor"}
```

```
print ("Union:", set1 | set2)  
print ("Intersection:", set1 & set2)  
print ("Difference:", set1 - set2)
```

4.) Document Organizer (Dictionary - Based)

Code:

```
docs = {1: "Report", 2: "Assignment"}
```

```
docs[2] = "Lab Manual"  
print ("After Update:", docs)
```

```
docs.pop(1)  
print ("After delete:", docs)
```

```
print ("Search ID 2:", 2 in docs)
```

5.) Calculator Application (Using list & Dictionary)

```
Code:    history = []  
         results = []
```

```
a = 10
```

```
b = 5
```

res = a + b

history.append("10 + 5")
results["Addition"] = res

print("History:", history)
print("Results:" results)