Assignment -5

i) Student Management System (Stack Based)

```
stack = []

def push (record):
 stack.append (record)

def pop ():
 if stack:
 print ("Undo :", stack.pop ())
 else:
 print (" Stack Empty")

push (" Amit Added ")
push (" Neha Added")
pop ()
print (" Current Stack:", stack)
```

ii) College Management System (Queue Based)

```
queue = []

def enqueue (name):
 queue.append (name)

def (deque) ():
 if queue :
 print (" Admitted :", que.pop (0)))
```

```
else :
    print ("Queue Empty")

enqueue ("Rahul")
enqueue ("Priya")
dequeue ()
print ("Waiting List :", queue)
```

iii) Electronic Tools Management System (Stack Application)

```
tools = []

tools.append ("Multimeter")
tools.append ("Oscilloscope")
print ("Removed :", tools.pop ())
print ("Available Tools :", tools)
```

iv) Document organizer (Link-lised based)

```
class Node:
 def _init_ (self, data):
   self.data = data
   self.nesct = None
head = Node ("Doc1")
head.nesct = Node ("Doc 2")
temp = head
while temp;
print (temp.data)
 temp = tempt.nesct
```

v) Calculator Application (Linked List-Based)

```
class Node :

def __init__ (self, data) :
    self.data = data
    self.next = None

head = Node ("5 + 3 = 8")
head.next = Node ("10 - 2 = 8")

temp = head
while temp:
    print (temp.data)
temp = temp.next.
```