**6.Write a python program to create append and remove elements from lists.**

**Aim:** To create a python program and perform list operations like append and remove elements from lists.

Description: In python, a list is a built-in data structure that allows us to store and manage a collection of item lists. Lists are one of the most versatile and commonly used data structure in python and are used for a wide range of task such as storing, collection of data, implementing data structures, and processing data.

In order to create, append and remove elements from lists in Python, we first determine the action the user wants to perform by accepting the choice from the user. Based on the user choice, we create a list by List\_name = [] and append the element into the list using append () and the removal of into elements from the list is done through remove() and display the updated list using print().

**Code:**

def create\_list():

global my\_list

my\_list = []

print("New empty list created.")

#return my\_list

def append\_to\_list(element):

my\_list.append(element)

print(f'Appended {element} to the list.')

def remove\_from\_list(element):

try:

my\_list.remove(element)

print(f'Removed {element} from the list')

except ValueError:

print(f'{element} not found in list')

def display\_list():

print("Current List",my\_list)

while True:

print("\nChoose an action")

print("1.Create a new list")

print("2.Append an element to the list")

print("3.Remove an element from the list")

print("4.Display the current list")

print("5.Exit")

choice = input("Enter your choice(1/2/3/4/5) :")

if choice == '1':

create\_list()

elif choice =='2':

element = input("Eneter an element to append : ")

append\_to\_list(element)

elif choice == '3':

element = input("Enter an element to remove :")

remove\_from\_list(element)

elif choice == '4':

display\_list()

elif choice == '5':

break

else:

print("Invalid choice. Please try again")

**Output:**

PS D:\23MCA36> python p6.py

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :1

New empty list created.

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :4

Current List []

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :2

Eneter an element to append : 10

Appended 10 to the list.

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :2

Eneter an element to append : 20

Appended 20 to the list.

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :2

Eneter an element to append : 30

Appended 30 to the list.

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :2

Eneter an element to append : 40

Appended 40 to the list.

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :4

Current List ['10', '20', '30', '40']

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :3

Enter an element to remove :20

Removed 20 from the list

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :4

Current List ['10', '30', '40']

Choose an action

1.Create a new list

2.Append an element to the list

3.Remove an element from the list

4.Display the current list

5.Exit

Enter your choice(1/2/3/4/5) :5