

برنامج محاكاة نظام التشغيل DOS

المرحلة السادسة:

في هذه المرحلة تم كتابة جزء اساسي اخر من البرنامج والذي سيتم من خلاله حذف فولدر وحذف ملف. حيث سيظهر عند تنفيذ البرنامج وكتابة الامر (mf,md) حيث سوف يتم خلاله عملية اضافة الملفات والفايلات على الجزء C.

ملاحظة مهمة :

هذا الكود ليس بالضرورة أن يكون الكتابة النمذجية وانما يمكن كتابته بأشكال اخرى حسب طريقة وتفكير المبرمج.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;

namespace ConsoleApplication1
{
    // ----- create node -----
    public class Node
    {
        public Node next;
        public string name;
        public string type;
        public string size;
    }

    //----- class create folder + file delete folder + file and print data -----
    public class LinkedList
    {
        private Node head;

        //----- add folder -----
        public void Add_Dir()
        {
            string xx;
            Node toAdd = new Node();

            Console.WriteLine("enter the name: ");
            xx = (Console.ReadLine());
            toAdd.name = (xx.Trim());

            toAdd.type = "<dir>";
            toAdd.size = "10 KB";

            if (head == null)
            { head = toAdd; head.next = null; }
            else
            {
                Node current = head;
                while (current.next != null)
                    current = current.next;
                current.next = toAdd;
            }
        }

        //----- add file -----
        public void Add_file()
        {
            string xx;
            Node toAdd = new Node();
```

```

    Console.Write("enter the name: ");
    xx = (Console.ReadLine());
    toAdd.name = (xx.Trim());

    toAdd.type = "file";
    toAdd.size = "20 KB";

    if (head == null)
    { head = toAdd; head.next = null; }
    else
    {
        Node current = head;
        while (current.next != null)
        { current = current.next; }
        current.next = toAdd;
    }
}

//----- delete folder -----
public void del_Dir()
{
    Node toAdd = new Node();
    string xx;

    Console.Write("enter the name: ");
    xx = (Console.ReadLine());
    xx = (xx.Trim());

    // if (head == null)
    // { Console.WriteLine ("not found any folder to delete ? "); }
    // else
    // {
        Node current = head;
        Node prev = head;
        while ((current != null)&&(current.name != xx))
        {
            prev = current;
            current = current.next;
        }
        if (current == null)
            Console.WriteLine("not found any folder to delete ? ");
        else
            prev.next = current.next;
    // }
}

//----- delete file -----
//----- print data -----
public void printAllNodes()
{
    int count_dir = 0;
    int count_file = 0;
    int sum_file = 0;
    int sum_dir = 0;

    Node current = head;
    Console.WriteLine("name \t" + "type \t" + "size");
    Console.WriteLine("---- \t" + "---- \t" + "----");

```

```

while (current != null)
{
    Console.Write(current.name + "\t");
    Console.Write(current.type + "\t");
    Console.WriteLine(current.size);
    if (current.type == "file")
    {
        count_file += 1;
        sum_file += 20;
    }
    else
    {
        count_dir += 1;
        sum_dir += 10;
    }
    current = current.next;
}
Console.WriteLine("---- \t" + "---- \t" + "----");
Console.WriteLine(" folder= " + count_dir);
Console.WriteLine(" size = " + sum_dir + "KB");
Console.WriteLine(" file= " + count_file);
Console.WriteLine(" size = " + sum_file + "KB");
Console.WriteLine("-----");

Console.WriteLine();
}
}

// ----- main program -----
class Program
{
    //----- determine the order ----
    static int prompt()
    {
        int flg=0 , i;
        string str;
        string [] dos=new string [6] {"md","mf","rd","del","dir","exit"};
        do
        {
            Console.Write("C:\\> ");
            str = (Console.ReadLine());
            str = (str.Trim());
            for (i=0;i<6 ;i++)
                if (dos[i] == str)
                {
                    flg = i+1;
                    break;
                }
            if (flg == 0)
                Console.WriteLine(" Bad Command");
        } while (flg==0);
        return flg;
    }

    //-----
    static void Main(string[] args)
    {
        LinkedList myList2 = new LinkedList();
        int op;
    }
}

```

```

do
{
    op= prompt();
    switch (op)
    {
        case 1:
            { myList2.Add_Dir(); break; }
        case 2:
            { myList2.Add_file(); break; }
        case 3:
            { myList2.del_Dir(); break; }
        case 4:
            { myList2.del_Dir(); break; }
        case 5:
            { myList2.printAllNodes(); break; }
    }
} while (op != 6);
}
}
}

```