

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

namespace QuanLySinhVien
{
    internal class Program
    {
        static List<Student> danhSachSinhVien = new List<Student>();
        static void Main(string[] args)
        {
            // Them sinh vien vao danh sach
            Student st1 = new Student(1234, "Nguyen Truong Giang", 21);
            danhSachSinhVien.Add(st1);
            Student st2 = new Student(1235, "Pham Tien Dong", 10);
            danhSachSinhVien.Add(st2);
            Student st3 = new Student(1236, "Vo Tan Tai", 15);
            danhSachSinhVien.Add(st3);
            Student st4 = new Student(1237, "Duong Minh Tien", 18);
            danhSachSinhVien.Add(st4);
            Student st5 = new Student(1238, "AHo Xuan Nguyen", 40);
            danhSachSinhVien.Add(st5);

            // Menu
            int choice;
            do
            {
                Console.Clear();
                Console.WriteLine("==== MENU QUAN LY SINH VIEN ====");
                Console.WriteLine("1. Xuat danh sach sinh vien");
                Console.WriteLine("2. Xuat danh sach sinh vien tuoi tu 15
den 18");
                Console.WriteLine("3. Xuat danh sach sinh vien co ten bat
dau bang chu A");
                Console.WriteLine("4. Tinh tong tuoi cua danh sach sinh
vien");
                Console.WriteLine("5. Xuat sinh vien co tuoi lon nhat");
                Console.WriteLine("6. Xuat danh sach sinh vien tang dan
theo tuoi");
                Console.WriteLine("0. Thoat");
                Console.Write("Nhap lua chon cua ban: ");
                choice = int.Parse(Console.ReadLine());

                switch (choice)
```

```
        {
            case 1:
                xuấtDanhSachSinhVien();
                break;
            case 2:
                xuấtDanhSachSinhVienTuoi1518();
                break;
            case 3:
                xuấtDanhSachSinhVienTenChuA();
                break;
            case 4:
                Console.WriteLine("Tong tuoi cua danh sach sinh
vien: " + tinhTongTuoiSinhVien());
                break;
            case 5:
                xuấtDanhSachSinhVienTuoiMax();
                break;
            case 6:
                xuấtDanhSachTangTheoTuoi();
                break;
            case 0:
                Console.WriteLine("Thoat chuong trinh.");
                break;
            default:
                Console.WriteLine("Lua chon khong hop le, vui
long thu lai.");
                break;
        }

        if (choice != 0)
        {
            Console.WriteLine("Nhan phim bat ky de tiep tục...");
            Console.ReadKey();
        }

    } while (choice != 0);
    Console.ReadKey();

}

static public void xuấtDanhSachSinhVien()
{
    var sinhVienQuery = from sv in danhSachSinhVien
                        select sv;

    Console.WriteLine("Danh sach sinh vien:");
```

```
        foreach (var sv in sinhVienQuery)
        {
            Console.WriteLine($"ID: {sv.ID1}, Ten: {sv.Name1}, Tuổi:
{sv.Age1}");
        }
    }

    static public void xuatDanhSachSinhVienTuoi1518()
    {
        var sinhVienQuery = from sv in danhSachSinhVien
                            where sv.Age1 >= 15 && sv.Age1 <= 18
                            select sv;

        Console.WriteLine("Danh sach sinh vien:");
        foreach (var sv in sinhVienQuery)
        {
            Console.WriteLine($"ID: {sv.ID1}, Ten: {sv.Name1}, Tuổi:
{sv.Age1}");
        }
    }

    static public void xuatDanhSachSinhVienTenChuA()
    {
        var sinhVienQuery = from sv in danhSachSinhVien
                            where sv.Name1.StartsWith("A")
                            select sv;

        Console.WriteLine("Danh sach sinh vien:");
        foreach (var sv in sinhVienQuery)
        {
            Console.WriteLine($"ID: {sv.ID1}, Ten: {sv.Name1}, Tuổi:
{sv.Age1}");
        }
    }

    static public int tinhTongTuoiSinhVien()
    {
        int tongTuoi = danhSachSinhVien.Sum(sv => sv.Age1);
        return tongTuoi;
    }

    static public void xuatDanhSachSinhVienTuoiMax()
    {
        int maxTuoi = danhSachSinhVien.Max(sv => sv.Age1);

        var sinhVienQuery = from sv in danhSachSinhVien
```

```
                where sv.Age1 == maxTuoi
                select sv;

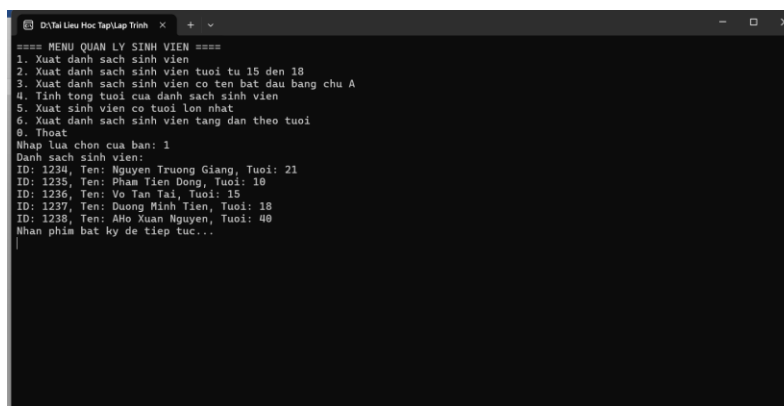
        Console.WriteLine("Danh sach sinh vien co tuoi lon nhat:");
        foreach (var sv in sinhVienQuery)
        {
            Console.WriteLine($"ID: {sv.ID1}, Ten: {sv.Name1}, Tuoi:
{sv.Age1}");
        }
    }

    static public void xuatDanhSachTangTheoTuoi()
    {
        var sinhVienQuery = from sv in danhSachSinhVien
                            orderby sv.Age1
                            select sv;

        Console.WriteLine("Danh sach sinh vien");
        foreach (var sv in sinhVienQuery)
        {
            Console.WriteLine($"ID: {sv.ID1}, Ten: {sv.Name1}, Tuoi:
{sv.Age1}");
        }
    }
}
```

Kết quả khi thực thi chương trình:

Lựa chọn 1:



```
D:\Tai Lieu Hoc Tap\Lap Trinh
===== MENU QUAN LY SINH VIEN =====
1. Xuat danh sach sinh vien
2. Xuat danh sach sinh vien tuoi tu 15 den 18
3. Xuat danh sach sinh vien co ten bat dau bang chu A
4. Tinh tong tuoi cua danh sach sinh vien
5. Xuat sinh vien co tuoi lon nhat
6. Xuat danh sach sinh vien tang dan theo tuoi
8. Thoat
Nhap lua chon cua ban: 1
Danh sach sinh vien:
ID: 1234, Ten: Nguyen Truong Giang, Tuoi: 21
ID: 1235, Ten: Pham Tien Dong, Tuoi: 10
ID: 1236, Ten: Vo Tan Tai, Tuoi: 15
ID: 1237, Ten: Duong Minh Tien, Tuoi: 18
ID: 1238, Ten: Aho Xuan Nguyen, Tuoi: 40
Nhấn phím bất kỳ để tiếp tục...
```

Lựa chọn 2:

```
D:\Tai Lieu Hoc Tap\Lap Trinh  x  +  v

==== MENU QUAN LY SINH VIEN ====
1. Xuat danh sach sinh vien
2. Xuat danh sach sinh vien tuoi tu 15 den 18
3. Xuat danh sach sinh vien co ten bat dau bang chu A
4. Tinh tong tuoi cua danh sach sinh vien
5. Xuat sinh vien co tuoi lon nhat
6. Xuat danh sach sinh vien tang dan theo tuoi
0. Thoat
Nhap lua chon cua ban: 2
Danh sach sinh vien:
ID: 1236, Ten: Vo Tan Tai, Tuoi: 15
ID: 1237, Ten: Duong Minh Tien, Tuoi: 18
Nhap phim bat ky de tiep tuc...
|
```

Lựa chọn 3:

```
D:\Tai Lieu Hoc Tap\Lap Trinh  x  +  v  -  □  x

==== MENU QUAN LY SINH VIEN ====
1. Xuat danh sach sinh vien
2. Xuat danh sach sinh vien tuoi tu 15 den 18
3. Xuat danh sach sinh vien co ten bat dau bang chu A
4. Tinh tong tuoi cua danh sach sinh vien
5. Xuat sinh vien co tuoi lon nhat
6. Xuat danh sach sinh vien tang dan theo tuoi
0. Thoat
Nhap lua chon cua ban: 3
Danh sach sinh vien:
ID: 1238, Ten: AHo Xuan Nguyen, Tuoi: 40
Nhap phim bat ky de tiep tuc...
|
```

Lựa chọn 4:

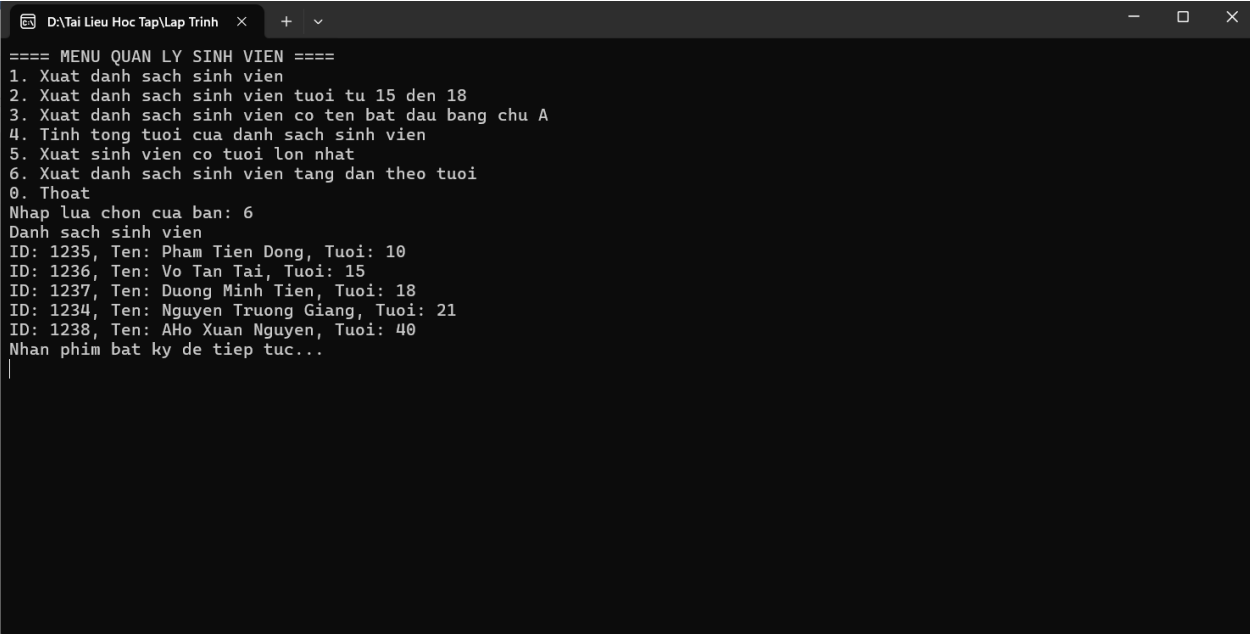
```
D:\Tai Lieu Hoc Tap\Lap Trinh x + v
==== MENU QUAN LY SINH VIEN ====
1. Xuat danh sach sinh vien
2. Xuat danh sach sinh vien tuoi tu 15 den 18
3. Xuat danh sach sinh vien co ten bat dau bang chu A
4. Tinh tong tuoi cua danh sach sinh vien
5. Xuat sinh vien co tuoi lon nhat
6. Xuat danh sach sinh vien tang dan theo tuoi
0. Thoat
Nhap lua chon cua ban: 4
Tong tuoi cua danh sach sinh vien: 104
Nhan phim bat ky de tiep tục...
|
```

Lựa chọn 5:

```
D:\Tai Lieu Hoc Tap\Lap Trinh x + v
==== MENU QUAN LY SINH VIEN ====
1. Xuat danh sach sinh vien
2. Xuat danh sach sinh vien tuoi tu 15 den 18
3. Xuat danh sach sinh vien co ten bat dau bang chu A
4. Tinh tong tuoi cua danh sach sinh vien
5. Xuat sinh vien co tuoi lon nhat
6. Xuat danh sach sinh vien tang dan theo tuoi
0. Thoat
Nhap lua chon cua ban: 5
Danh sach sinh vien co tuoi lon nhat:
ID: 1238, Ten: AHo Xuan Nguyen, Tuoi: 40
Nhan phim bat ky de tiep tục...
|
```

Nguyễn Trường Giang - 2280600761

Lựa chọn 6:



```
D:\Tai Lieu Hoc Tap\Lap Trinh  x  +  v
==== MENU QUAN LY SINH VIEN ====
1. Xuat danh sach sinh vien
2. Xuat danh sach sinh vien tuoi tu 15 den 18
3. Xuat danh sach sinh vien co ten bat dau bang chu A
4. Tinh tong tuoi cua danh sach sinh vien
5. Xuat sinh vien co tuoi lon nhat
6. Xuat danh sach sinh vien tang dan theo tuoi
0. Thoat
Nhap lua chon cua ban: 6
Danh sach sinh vien
ID: 1235, Ten: Pham Tien Dong, Tuoi: 10
ID: 1236, Ten: Vo Tan Tai, Tuoi: 15
ID: 1237, Ten: Duong Minh Tien, Tuoi: 18
ID: 1234, Ten: Nguyen Truong Giang, Tuoi: 21
ID: 1238, Ten: AHo Xuan Nguyen, Tuoi: 40
Nhap phim bat ky de tiep tục...
|
```