using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace SydneyHotel

{

class Program

{

class ReservationDetail

{

public string customerName { get; set; }

public int nights { get; set; }

public string roomService { get; set; }

public double totalPrice { get; set; }

}

// calulation of room services

//Pujan Budathoki

static double Price(int night, string isRoomService)

{

double price = 0;

if((night > 0 )&& (night <= 3))

price = 100\*night;

else if((night > 3 )&& (night <= 10))

price = 80.5\*night;

else if((night > 10 )&& (night <= 20))

price = 75.3\*night;

//roomservice should be checked to lower yes

if(isRoomService.ToLower()=="yes")

return price+price\*0.1;

else

return price;

}

static void Main(string[] args)

{

Console.WriteLine(".................Welcome to Sydney Hotel...............");

Console.Write("\nEnter no. of Customer: ");

int n = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("\n--------------------------------------------------------------------\n");

ReservationDetail[] rd = new ReservationDetail[n];

for(int i = 0; i < n; i++)

{

rd[i] = new ReservationDetail();

Console.Write("Enter customer name: ");

rd[i].customerName=Console.ReadLine();

Console.Write("Enter the number of nights: ");

rd[i].nights=Convert.ToInt32(Console.ReadLine());

if (!(rd[i].nights > 0) && (rd[i].nights <= 20))

{

Console.Write("Number of nights in between 1 to 20: ");

Console.Write("Enter the number of nights: ");

rd[i].nights = Convert.ToInt32(Console.ReadLine());

}

Console.Write("Enter yes/no to indicate wheather you want ta room service: ");

rd[i].roomService=Console.ReadLine();

rd[i].totalPrice = Price(rd[i].nights, rd[i].roomService);

Console.WriteLine($"The total price from {rd[i].customerName} is ${rd[i].totalPrice}");

Console.WriteLine("\n--------------------------------------------------------------------");

}

var (minPrice,minindex) = rd.Select(x=>x.totalPrice).Select((m,i) => (m,i)).Min();

var (maxPrice,maxindex) = rd.Select(x => x.totalPrice).Select((m, i) => (m, i)).Max();

ReservationDetail maxrd = rd[maxindex];

ReservationDetail minrd =rd[minindex];

Console.WriteLine("\n\t\t\t\tSummary of reservation");

Console.WriteLine("--------------------------------------------------------------------\n");

Console.WriteLine("Name\t\tNumber of nights\t\tRoom service\t\tCharge");

Console.WriteLine($"{minrd.customerName}\t\t\t{minrd.nights}\t\t\t{minrd.roomService}\t\t\t{minrd.totalPrice}");

Console.WriteLine($"{maxrd.customerName}\t\t{maxrd.nights}\t\t\t{maxrd.roomService}\t\t\t{maxrd.totalPrice}");

Console.WriteLine("\n--------------------------------------------------------------------\n");

Console.WriteLine($"The customer spending most is {maxrd.customerName} ${maxrd.totalPrice}");

Console.WriteLine($"The customer spending least is {minrd.customerName} ${minrd.totalPrice}");

Console.WriteLine($"Press any ket to continue....");

Console.ReadLine();

}

}

}