

using System;

namespace ConsoleRegisterStudent

{

class Program

{

static void Main(string[] args)

{

(new Program()).run();

}

void run()

{

int choice;

int firstChoice = 0, secondChoice = 0, thirdChoice = 0;

int totalCredit = 0;

string yesOrNo = "";

Console.WriteLine("Teacher's Copy");

do

{

WritePrompt();

choice = Convert.ToInt32(Console.ReadLine());

switch (ValidateChoice(choice, firstChoice, secondChoice, thirdChoice, totalCredit))

{

case -1:

Console.WriteLine($"Your entered selection {choice} is not a recognized course.");

break;

case -2:

Console.WriteLine($"You have already registered for the {ChoiceToCourse(choice)} course.");

break;

case -3:

Console.WriteLine("You cannot register for more than 9 credit hours.");

break;

case 0:

totalCredit += 3;

if (firstChoice == 0)

firstChoice = choice;

else if (secondChoice == 0)

secondChoice = choice;

else if (thirdChoice == 0)

thirdChoice = choice;

break;

}

WriteCurrentRegistration(firstChoice, secondChoice, thirdChoice);

Console.Write("\nDo you want to register for another course? (Y|N)? : ");

yesOrNo = Console.ReadLine().ToUpper();

} while (yesOrNo == "Y");

Console.WriteLine("Thank you for registering with us.");

}

void WritePrompt()

{

Console.WriteLine("\nPlease select a course for which you want to register by typing the number inside []");

Console.WriteLine("[1] IT 145\n[2] IT 200\n[3] IT 201\n[4] IT 270\n[5] IT 315\n[6] IT 328\n[7] IT 330");

Console.Write("Enter your choice: ");

}

int ValidateChoice(int choice, int firstChoice, int secondChoice, int thirdChoice, int totalCredit)

{

// Check for invalid course number

if (choice < 1 || choice > 7)

return -1;

// Check if already registered for that course

if (choice == firstChoice || choice == secondChoice || choice == thirdChoice)

return -2;

// Check if adding another 3-credit course exceeds limit

if (totalCredit + 3 > 9)

return -3;

// Otherwise valid

return 0;

}

void WriteCurrentRegistration(int firstChoice, int secondChoice, int thirdChoice)

{

Console.Write("You are currently registered for: ");

if (firstChoice == 0)

Console.WriteLine("no courses yet.");

else if (secondChoice == 0)

Console.WriteLine($"{ChoiceToCourse(firstChoice)}");

else if (thirdChoice == 0)

Console.WriteLine($"{ChoiceToCourse(firstChoice)}, {ChoiceToCourse(secondChoice)}");

else

Console.WriteLine($"{ChoiceToCourse(firstChoice)}, {ChoiceToCourse(secondChoice)}, {ChoiceToCourse(thirdChoice)}");

}

string ChoiceToCourse(int choice)

{

switch (choice)

{

case 1: return "IT 145";

case 2: return "IT 200";

case 3: return "IT 201";

case 4: return "IT 270";

case 5: return "IT 315";

case 6: return "IT 328";

case 7: return "IT 330";

default: return "Unknown Course";

}

}

}

}