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Directory structure: Prime number detection

1. **Using while loop to detection the input numer.**

// test.cpp: 主要專案檔。

#include "stdafx.h"

#include "iostream"

using namespace System;

using namespace System::Collections;

int main(array<System::String ^> ^args)

{

ArrayList ^a = gcnew ArrayList();

int num,ans,i=1;

do

{

Console::Write("請輸入一個數字：");

try

{

num = Convert::ToInt16(Console::ReadLine());

if(num>99||num<2)

{

throw gcnew ArgumentOutOfRangeException();

}

else

{

while(i<num+1)

{

ans=num%i;

i++;

if(ans==0)

{

a->Add(i-1);

}

}

Console::Write("因數有： ");

for each(Object^ item in a)

Console::Write("{0} ",item);

Console::WriteLine();

if(a->Count==2)

{

Console::WriteLine("你輸入的數字 {0} 為質數",num);

}

else

{

Console::WriteLine("你輸入的數字 {0} 為非質數",num);

}

}

}

catch(ArgumentOutOfRangeException ^error)

{

Console::WriteLine("輸入之數字必須在2~99之間！錯誤訊息為："+error->Message);

}

catch(Exception ^error)

{

Console::WriteLine("錯誤訊息為："+error->Message);

}

}while(num>99||num<2);

system("pause");

return 0;

}