How to get a sequence of regular indices in C?

(such as the sequence [2 6 10], starting at 2 and the step is 4 and go through 3 times)

[intro]

Using the class -- slice.

slice is a special class that achieve this.

[Example]

The following statement of the following code

The object named second will contain

[namespace]

std

[library]

<valarray>

It was declared and defined in the valarray.h header file.

[code]

#include <iostream>

#include <string>

#include <cstddef>

#include <valarray>

using namespace std;

template <class T>

void PrintValarray(valarray<T> va, string name)

{

cout<<name<<":"<<endl;

for(int i=0;i<va.size();i++)

{

cout<<va[i]<<" ";

}

cout<<endl;

}

int main ()

{

std::valarray<int> foo (12);

for (int i=0; i<12; ++i)

{

foo[i]=i\*i;

}

std::slice second (2,3,4);

std::slice third (second);

std::valarray<int> bar = foo[third];

PrintValarray<int>(foo,"foo");

cout<<"---------"<<endl;

PrintValarray<int>(bar,"bar");

cout<<"---------"<<endl;

return 0;

}

[result]

foo:

0 1 4 9 16 25 36 49 64 81 100 121

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bar:

4 36 100

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[ref]

<https://cplusplus.com/reference/valarray/slice/slice/>