

Data2 –Quiz (Pointers & Memory allocation) – Spring– 2023/2224

منسق المادة: د. بيان الفيومي

Answer are at the end of the test bank

Q: Write a c++ program to dynamically allocate an array of integers and initialize its elements: **[10 marks]**



Answers

```
#include <iostream>
#include <string>
using namespace std;

void main()
{
    int numIntegers;
    cout << "Hi Dr.Bayan ,,, please enter the number of integers: ";
    cin >> numIntegers;

    int *integers = new int[numIntegers];

    cout << "Enter " << numIntegers << " integers:\n";
    for (int i = 0; i < numIntegers; ++i)
    {
        cin >> integers[i];
    }

    cout << "Integers and their addresses:\n";
    for (int i = 0; i < numIntegers; ++i) {
        cout << "Integer: " << integers[i] << "\tAddress: " << &integers[i] << endl;
    }

    delete[] integers;
}
```