

# **CHANDIGARH UNIVERSITY**

## **UIC**

### **OOPs LAB PRACTICAL**

#### **Practical No. – 9**

**Name :- Amar Preet Das**

**Section :- 19BCA2-A**

**Group :- II**

**UID :- 19BCA1129**

**Submitted to:- Prof. Dr Kirti Walia**

## Practical 9)

WAP to understand the concept of new and delete operator.

Ans)

Code :-

```
#include <iostream>

using namespace std;

int main() {

    int size,i;    //integer variable

    int *ptr=NULL;    //taking pointer to locate new memory initiating with null

    cout<<"Enter the size of array: ";

    cin>>size;    //taking input for size of array

    ptr = new int[size];    //assigning new memory using new operator

    for(i=1;i<=size;i++){    //for loop to get inputs
        cout<<"Enter "<<i<<" element of array: ";
        cin>>ptr[i];
        cout<<endl;
    }

    cout<<"Entered array are: "<<endl;    //for loop to display the inputs

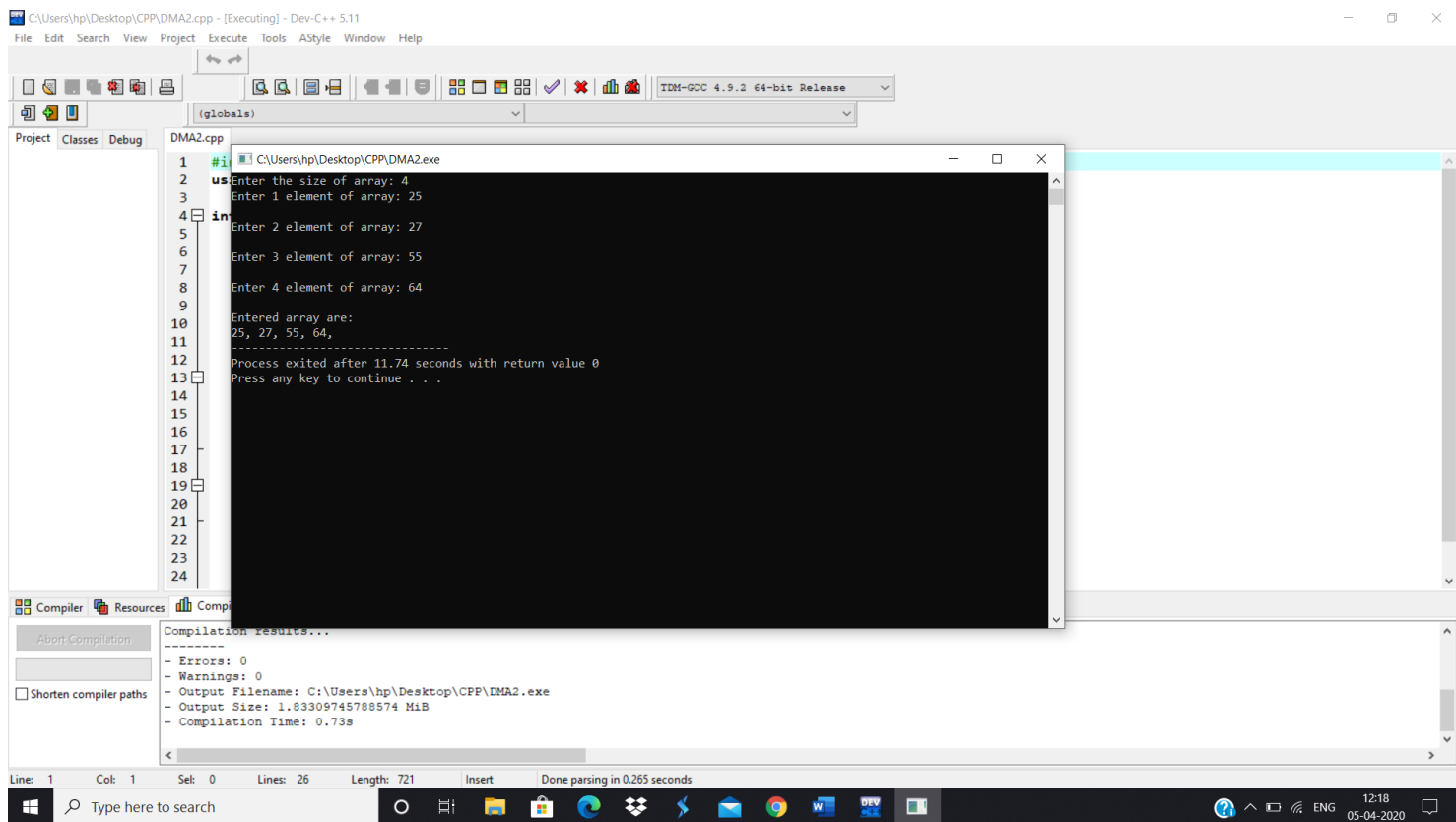
    for(i=1;i<=size;i++){
        cout<<ptr[i]<<" ";
    }

    delete ptr;    //using delete operator to free memory allocated

    return 0;

}
```

## OUTPUT:-



The screenshot shows the Dev-C++ IDE with the following components:

- File Explorer:** Shows the project file `DMA2.cpp` at `C:\Users\hp\Desktop\CPP\DMA2.cpp`.
- Code Editor:** Displays the source code for `DMA2.cpp`. The code prompts the user to enter the size of an array (4) and then four elements (25, 27, 55, 64). It then displays the entered array and exits after 11.74 seconds.
- Compiler Output:** Shows the compilation results, including the output filename `C:\Users\hp\Desktop\CPP\DMA2.exe` and the compilation time of 0.73s.
- Terminal:** Displays the runtime output of the program, showing the entered array elements and the exit message.

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int n;
6     Enter the size of array: 4
7     Enter 1 element of array: 25
8     Enter 2 element of array: 27
9     Enter 3 element of array: 55
10    Enter 4 element of array: 64
11    Entered array are:
12    25, 27, 55, 64,
13    -----
14    Process exited after 11.74 seconds with return value 0
15    Press any key to continue . . .
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```

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\hp\Desktop\CPP\DMA2.exe
- Output Size: 1.83309745788574 MiB
- Compilation Time: 0.73s

Done parsing in 0.265 seconds