

**Department of Electrical and Computer Engineering Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology, Haripur, Pakistan**

**COMP112L Time: 1.5 hrs. Marks: 10**

**Instructor: Engr. Rafi Ullah Dated:2nd Nov, 2021**

**Name: Ahmed Raza Registration #: B20F0436CS031**

**Lab # 03**

**Task 1:**

Write a C++ program which take the number from the user and create a dynamic array having size of a given number. This program then should print only all the even numbers. After printing, the program must free up the memory allocated to that array.

**Solution:**

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| **CODE**  **#include<iostream>**  **using namespace std;**  **int main(){**  **int size;**  **cout<<"Enter the size of array : ";**  **cin>>size;**  **int arr[size];**  **cout<<endl;**  **cout<<"Enter Random numbers in the array : ";**  **for(int i=0; i<size; i++)**  **{**  **cin>>arr[i];**  **}**  **cout<<"Even numbers in the array are : ";**  **for(int i=0; i<size; i++)**  **if(arr[i]%2==0)**  **{**  **cout<<arr[i]<<" ";**  **}**  **return 0;**  **}**  **OUTPUT** |

**Task # 02:**

Write a C++ program which extends the first task in a way that take two numbers from the user, called min and max. First the program creates the array to the size of min number and print the given numbers. After that, it dynamically resizes the array to the max number and print all the number up to the max number.

**Solution:**

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| **CODE**  **#include<iostream>**  **using namespace std;**  **int main()**  **{**  **int min, max;**  **cout<<"Enter the minimum number : ";**  **cin>>min;**  **cout<<"Enter the maximum number : ";**  **cin>>max;**  **int min\_arr[min];**  **int max\_arr[max];**  **cout<<"Minmum numbers stored in the array are :";**  **for(int i=0; i<=min; i++)**  **{**  **min\_arr[i]=i;**  **cout<<min\_arr[i]<<" ";**  **}**  **cout<<endl;**  **cout<<"Maximum numbers stored in the array are :";**  **for(int i=min+1; i<=max; i++)**  **{**  **max\_arr[i-min]=i;**  **cout<<max\_arr[i-min]<<" ";**  **}**  **return 0;**  **}**  **OUTPUT** |