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| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
|  | **Course:** | **Object Oriented Programming** | **Course Code:** | **CS-217** |
| **Program:** | **BS Computer Science** | **Semester:** | **Spring 2024** |
| **Duration:** | **20 minutes** | **Total Marks:** | **10** |
| **Date:** | **-** | **Weight:** | **-** |
| **Section:** | **D** | **Page(s):** | **1** |
| **Exam:** | **Quiz 1 (a)** | **Roll No.** |  |

**Q1. For the given code, give the output or error. In case of error specify which line causes it. (5)**

#include<iostream>

using namespace std;

void main()

{

int\* ptr = 0;

int size = 5;

for (int j = 0; j < 2; j++)

{

ptr = new int[size];

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

{

\*ptr = i + 1;

ptr++;

}

int\* temp = ptr - size;

cout << \*(ptr - 1) << ", " << \*temp + size << endl;

}

}

5, 6  
5, 6

**Q2. Complete the main function in the following code, then write updateArray() function that accepts an integer pointer and its size as parameters. It should update the contents of the array such that the printing in the main() function displays the factorial values of each index. (For example, size = 5 would print: 1 2 6 24 120)   
(5)**

void main()

{

int size;

cin >> size;

// pointer initialization, function call, and printing:

int\* ptr;

ptr = new int[size];

updateArray(ptr, size);

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

cout << ptr[i] << ", ";

}

**Write updateArray() function below:**

void updateArray(int\*& arr, int size)

{

int fact = 1;

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

{

fact \*= i + 1;

arr[i] = fact;

}

}