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	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;
```

~~Output:~~

{

{

{

{

{

{

{

{

{

{

{



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 *arr = new int [size];
int *VARRAY = (arr, size);
    for (int i=0; i < size; i++) {
        cin >> arr[i];
    }

int *VARRAY = updateArray(arr, size);
```

Write updateArray() function below:

```
int *updateArray(int *arr, int &size) {
    for (int i=0; i < size; i++) {
        int k=1;
        while (k <= arr[i]) {
            arr[i] = arr[i]*k + arr[i];

            k++;
        }
        return arr[i];
    }
}
```

*only returns one index.*