

- 1) What is the output of the following C++ code?

```
int x;
int y;
int *p= &x;
int *q= &y;
x=35;
y=46;
p=q;
*p = 78;
cout<<x<<" "<<y<<endl;
cout<<*p<<" "<<*q<<endl;
```

- 2) What is the output of the following code?

```
int x;
int *p;
int *q;
p=new int[10];
q=p;
*p=4;
for(int j=0; j<10; j++)
{
    x=*p;
    p++;
    *p=x+j;
}
for (int k=0; k<10; k++)
{
    cout<< *q<<" ";
    q++;
}
cout<<endl;
```

- 3) `names` is an integer array with 20 elements. Write a regular for loop, as well as a range-based for loop that prints each element of the array.
- 4) The arrays `numberArray1` and `numberArray2` have 100 elements. Write code that copies the values in `numberArray1` to `numberArray2`.
- 5) In a program you need to store the identification numbers of 10 employees (as `int` s) and their weekly gross pay (as `double` s).
- A) Define two arrays that may be used in parallel to store the 10 employee identification numbers and gross pay amounts.
- B) Write a loop that uses these arrays to print each employee's identification number and weekly gross pay.
- 6) Define a two-dimensional array of integers named `grades`. It should have 30 rows and 10 columns.
- 7) In a program you need to store the populations of 12 countries.
- A) Define two arrays that may be used in parallel to store the names of the countries and their populations.
- B) Write a loop that uses these arrays to print each country's name and its population.
- 8) The following code totals the values in two arrays: `numberArray1` and `numberArray2`. Both arrays have 25 elements. Will the code print the correct sum of values for both arrays? Why or why not?

```
int total = 0;           // Accumulator
int count;              // Loop counter

// Calculate and display the total of the first array.

for (count = 0; count < 24; count++)
    total += numberArray1[count];
cout << "The total for numberArray1 is " << total << endl;
// Calculate and display the total of the second array.
for (count = 0; count < 24; count++)
    total += numberArray2[count];
cout << "The total for numberArray2 is " << total << endl;
```