

BIL 104E QUIZ 5 (Section B)

1) Write C++ statements to do the following(30)

a. Declare an array alpha of 15 components of type `int`.

```
Int alpha[15]
```

b. Output the value of the tenth component of the array alpha.

```
Cout<<alpha[9]
```

c. Set the value of the fifth component of the array alpha to 35.

```
alpha[4]=35
```

d. Set the value of the ninth component of the array alpha to the sum of the sixth and thirteenth components of the array alpha.

```
alpha[8]=alpha[5]+alpha[12]
```

e. Set the value of the fourth component of the array alpha to three times the value of the eighth component minus 57.

```
alpha[3]=3*alpha[7]-57
```

f. Output alpha so that five components per line are printed.

```
for(int i=0; i<=14;i++){
```

```
    If(i%5==0){
```

```
        cout<<endl;
```

```
    }
```

```
    cout<<alpha[i]<<" ";
```

```
}
```

2) Suppose list is an array of six components of type `int`. What is stored in list after the following C++ code executes? (30)

```
list[0] = 5;
```

```
for (int i = 1; i < 6; i++)
```

```
{
```

```
    list[i] = i * i + 5;
```

```
    if (i > 2)
```

```
        list[i] = 2 * list[i] - list[i - 1];
```

```
}
```

Index	Value
-------	-------

0	5
---	---

1	6
---	---

2	9
---	---

3	19
---	----

4	23
---	----

5	37
---	----

3) Write a C++ function, sumArray, that takes as parameters an `int` array and its size and returns the sum and average of the elements in the array. (40)

```
void sumArray(int array [], int size){  
    int sum=0;  
    for(int i=0; i<size;i++){  
        sum=sum+array[i];  
    }  
  
    cout<<"Sum: "<<sum<<endl;  
    cout<<"Average:"<<sum/size;  
}
```