

EE 2905

Dr. Johnson

Homework 6

1 – Write a single line of code to do each task

10pts

Create an array of ints, named `ArrayInt`, with 15 elements.

Create an array with integer values 6 to 12.

Create an array of ints with 200 values, all 0 except the first 3, which are 11.

Create an array of floats with 1000 values, all 0s.

Create an array of characters that can hold up to 26 letters.

2 – Given an array with the following values, evaluate each snippet of code 10pts

```
int myArray[15] = {1 2 3 4 5 6 7 8 9 10 11 12 13 14 15};
```

```
foo = myArray[5];
```

foo =

```
foo = myArray[3 + 3];
```

foo =

```
foo = myArray[15];
```

foo =

```
foo = myArray[6] = myArray[5];
```

foo =

```
foo = myArray[(myArray[11] % 5)];
```

foo =

3 – Provide the values for each array after executing the following code snippets
each snippet is evaluated independently 20pts

given:

```
int myArray[6];
```

```
int j;
```

```
for(j = 0; j < 6; j++)  
    myArray[ j ] = 2 * j;
```

values in array

```
for(j = 0; j < 4; j++)  
    myArray[ j+1 ] = 5;
```

```
for(j = 3; j >=0; j--)  
    myArray[ j ] = 5 - j;
```

```
for(j = 203; j < 206; j++)  
    myArray[ j - 202 ] = j % 2;
```

```
int myArray2[] = {5,6,7,8,9};  
for(j = 0; j < 5; j++)  
    myArray2[ j ] = myArray2[ 5 - j];
```

4 – Fill in the memory map at the end of the following code

30pts

```
int foo, boo;  
int* zoo, soo;  
int myArray[6] = {3,4,5};
```

```
foo = myArray[2];  
zoo = &myArray[4];  
myArray[2] = foo;  
int j;  
for(j = 3; j < 5; j++){  
    myArray[ j ] = 2 * j % 3;  
}  
*zoo = 15;  
myArray[5] = (int)zoo;  
boo = myArray[6];  
myArray[3] = boo;
```

value	address
	0x1000
	0x1004
	0x1008
	0x100C
	0x1010
	0x1014
	0x1018
	0x101C

myArray

5 – Given an array with the following values, evaluate each snippet of code 30pts

```
int myArray[3][4] = {12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1};
```

```
foo = myArray[2][2];
```

foo =

```
foo = myArray[0][1];
```

foo =

```
int foo1 = 0;
```

```
int foo2 = 0;
```

```
int foo3 = 0;
```

foo1 =

```
for (j = 0; j < 4;j++){
```

foo2 =

```
    foo1 += myArray[0][ j ];
```

```
    foo2 += myArray[ j ][0];
```

```
    foo3 *= myArray[ j ][ j ];
```

foo3 =

```
}
```