

1. Given the following declarations:

```
int list[10] = { 7, 1, 5, 4, 3, 8, 0, 9, 6, 2 };  
int n = 5;
```

Answer these questions, using the original values for each question:

a) Write a statement which will decrease the value of the last element by 1.

_____ **list[9] = list[9] - 1** _____

b) What is the value of **list [n]** ?

_____ **8** _____

c) What is the value of **list [n - 1]** ?

_____ **3** _____

d) What is the output of this loop:

```
for (n = 1; n < 9; n = n + 2)  
    cout << list [n];
```

_____ **1 4 8 9** _____

2. a) Write a declaration for an array of integers named sales that has 10 rows and 5 columns:

_____ **int sales[10][5];** _____

b) Write a nested for loop to initialize all of the values in your sales array declared in a) to a value of -1:

```
for (int row=0; row < 10; row++)  
{  
    for (int col=0; col < 5; col++)  
    {  
        sales[row][col] = -1;  
    }  
}
```

3. Given these declarations: int array[5];
 int n, k;

Code a loop which assigns these values to array: Value | 0 | 2 | 4 | 6 | 8 |

```
k = 0;  
for (n=0; n < 5; n++)  
{  
    array[n] = k;  
    k = k + 2;  
}
```

4. Given these declarations: int sample[5];
 int k;

Show the values which are assigned to the array by the execution of the following code:

```
for (k = 1; k < 5; k++)  
    if (k > 2)  
        sample[k] = k * k;  
    else sample[k] = k + 1;
```

		2	3	9	16
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5. a) Write a function which will take parameters of an array of integers and an integer which is the number of elements in the array. The function should count and return the number of values in the array which are negative.

```
int odds(int array[], int size)
{
    int oddsum = 0;
    for (int i=0; i<size; i++)
    {
        if (array[i] < 0)
            oddsum++;
    }
    return oddsum;
}
```

- b) Call your function from (a) to store in the variable **numNeg** the number of negative values in the 100-element array **MyArray**.

```
numNeg = odds(MyArray, 100);
```

- c) Call your function from (a) to store in the variable **nonNeg** the number of values in the array **YourArray** which are not negative. The number of elements currently assigned to YourArray is stored in the variable **size**.

```
int numNeg;
numNeg = odds(YourArray, size);
nonNeg = size - numNeg;
```