

Question #1:

- (a) `items[0].price = 25;`
- (b) `strcpy(items[99].name, "jukebox");`

Question #2:

```
x = 10, y = 20, *p1 = 30
x = 40, y = 20, *p1 = 20
x = 40, y = 70, *p1 = 70
```

Question #3:

```
void display_backwards (PNODE pList)
{
    if (pList == NULL)
        return;

    display_backwards(pList->next);
    printf("%d\n", pList->x);
    return;
}
```

Question #4:

```
int check_strings1(char str1[], char str2[])
{
    int length, i;

    /* If strings have different lengths,
       they can't be exact reverses of each other. */
    if (strlen(str1) != strlen(str2))
        return 0;

    /* Compare all characters that should be equal. */
    length = strlen(str1);
    for (i = 0; i < length; i++)
        if (str1[i] != str2[length-1-i])
            return 0;

    /* If we get here, all comparisons passed the check. */
    return 1;
}
```

Question #5:

```
int second_largest(int arr[], int size)
{
    int n1 = 0; /* Stores largest number so far. */
    int n2 = 0; /* Stores second largest number so far. */
    int i;

    /* Loop through all elements. */
    for (i = 0; i < size; i++)
```

```
{
    if (arr[i] > n1) {
        /* Current element is largest so far. */
        n2 = n1;
        n1 = arr[i];
    }
    else if (arr[i] > n2) {
        /* Current element is second largest so far. */
        n2 = arr[i];
    }
}
return n2;
}
```