

1. What is the output of the following program segment? **Write your answer below each cout statement.**

```
typedef int * intPtr;  
intPtr    p, q;  
int       x=5, y=10;
```

```
p=&y;  
q=p;  
*q = *p+10;  
x=*q - 10;  
y= x - 5;
```

```
cout << x << " " << y << " " << *p << " " << *q << endl;
```

```
p=new int;  
*p = 5;  
*q = *p + 5;  
x = *q;
```

```
cout << x << " " << y << " " << *p << " " << *q << endl;
```

2. Show the C++ statement to release the memory space pointed at by the pointer 'p'.
3. Given : struct **bookType** {  
    string title;  
    float price;  
};
- a) Show the C++ statement to declare a pointer variable named "ptr" that can be used to point to a memory location for a **bookType** value.
- b) Show the C++ statement to dynamically acquire the memory space for data of type "**bookType**" and let pointer variable "**ptr**" point to that memory location.
- c) Show the C++ statement to assign the title of the book "The Departed" using the pointer variable "**ptr**"