Question #1 (5 points)

Consider the following code:

```
int main() {
  int x = 1;
  int y = 2;
  int* ptr1 = &x;
  int* ptr2 = &y;
  *ptr2 = 3;
  ptr2 = ptr1;
  *ptr2 = 4;

  return 0;
}
```

Which of the following statements is correct in the just before the return 0 statement? Assume that all necessary standard libraries are included.

- ○ A. x=4, y = 3, both ptr1 and ptr2 point to x
- ○ B. x=3, y = 4, ptr1 points to y
- ○ C. x=1, y = 3, ptr2 points to x
- ○ D. x = 1, y=3, both ptr1 and ptr2 point to y
- ○ E. x = 4, y=2, ptr1 points to x
- ○ F. No answer

Question #2 (5 points)

Consider the following code

```
int main() {
  int ar[4] = {10, 20, 30};
  const int* ptr = ar;
  printf("%d ", *(ptr+1));

  ptr = ptr+1;
  printf("%d", *(ptr+1));

  return 0;
}
```

Which of the statements below is correct? Assume that all necessary standard libraries are included.

- ○ A. The code will not compile because there is an error in the first printf() line
- ○ B. The code will not compile because there is an error in the second printf() line
- ○ C. The code will compile and print "20 30"
- ○ D. The code will not compile because of an error in the line "ptr = ptr+1"
- ○ E. The code will compile and print "20 20"
- ○ F. The code will not compile because of an error in line "const int* ptr = ar;"
- ○ G. The code will not compile because ar has 4 elements but we initialize it with only 3 elements
- ○ H. The code will compile, but the behavior is undefined, because the array is not initialized