

**UPPSALA UNIVERSITY
DEPARTMENT OF INFORMATION TECHNOLOGY**

**COMPUTER SYSTEMS/OPERATING SYSTEMS
Fall, 2007**

IN-CLASS EXERCISE 1

1. What is the output of the program in Example 1?

2. What is the output of the program in Example 2?

3. The following program is a modified version of Example 3. Complete the program by filling in the spaces provided.

```
#include <stdio.h>

int
main()
{
    int nStudents, nFaculty;

    printf("How many students and faculty does Uppsala University have?\n");

    scanf(______);
    /* You may use only one scanf statement to accept the two values.
       Assume that a space will be used by the user to delimit the
       two input values */

    printf(______);
    /* You may use only one printf statement to print the values. Use a
       meaningful statement to do so. */

    return 0;
}
```

4. This problem is based on Example 4. Change the *if* statement in the program to a *while*, such that the program will remain in the loop until level is greater than the DANGERLEVEL.

```
float level = 1;
```

```
{  
    printf("Low on gas!\n");  
    level = FillingGas(); //Method or function that fills gas  
                          //and updates level.  
}  
  
printf("I'm on my way!\n");
```

5. In Example 5, after the array is initialized, the statement:

```
number[index] = index;
```

will return an error. Why?

6. What is the output of the following code segment?

```
char name[] = {'A', 'l', 'e', 'x', '\\0', 'a', 'n', 'd', 'e', 'r'};  
  
printf(" The length of the string is %d\n", strlen(name));  
printf(" And the string is %s\n", name);
```