

CS 60
SECOND QUIZ
April 13, 2010

WRITE ALL YOUR ANSWERS ON SPACE PROVIDED.
ANSWER ALL FOUR QUESTIONS. TOTAL POINTS IS 30.

NAME: _____

1 { Circle for each part True or False depending whether or not the statement is true or false. Each question is worth 1.5 points }

- { **True** or False } The line `int xx;` inside the main function declares variable `xx` as an integer stored using four bytes.
- { True or **False** } The for statement `for(i = 0; i > 0; i++);` is an invalid statement in C.
- { **True** or False } The body of the for statement `for(i = 0; i < 0; i++)` is executed zero times.
- { True or **False** } Just after the following three lines, the value of `x` is equal to 8.

```
int x = 4;
int y = 8;
x = y = 4;
```

- { True or **False** } When `x` is declared as an integer, then the value of `x` is equal to 1 after executing the statement `x = (3 == 5);`
- { True or **False** } When `x` is declared as an integer, then the value of `x` equal to 100 after executing the statement `x = 101 && 102;`
- { **True** or False } When `x` is declared as an integer, then the value of `x` equal to 100 after executing the statement `x = 101 & 102;`
- { True or **False** } In C the statement `x = 2 ^ 4` assigns `x` the value of 16.
- { **True** or False } In C the statement `x = (y = 2) + (z = 3);` assigns `x` the value of 5.
- { **True** or False } The line `enum {a=1, b, c, d}` assigns `a` the value 1, `b` the value 2, `c` the value 3, and `d` the value of 4.
- { True or **False** } The line `int x, y=99;` declares `x` and `y` to be integers and assigns to `x` and `y` the initial value of 99.
- { True or **False** } The line `int x=y=99;` declares `x` and `y` to be integers and assigns to `x` and `y` the initial value of 99.
- { True or **False** } The Unix (Linux) command `rm` is used to Rename files.
- { True or **False** } The Unix (Linux) command `cp` is used to list the files in the current directory.

2 If statement [1 point]

Clearly indicate what is the value printed when the following block of code is executed.

```
{ int x=0;
  int y=0;
  if (x == 1)
    y += 1;
    x += 1;
  printf("%d\n",x);      -> 1
}
```

3 If statement [2 points]

What does the following program print? the second if.

```
int x=3;
int y=3;
if (x == 3)
  if (y == 2)
    printf("***\n");
    x++;
else
  printf("###\n");
printf("%d %d\n",x,y);
```

-> Syntax is wrong
-> Everyone gets 2 points

4 Switch [4 points]

What is printed when when the input value for **s** is 2? How about when the input value is 1? How about when the input value is 3? How about when the input value is -1 ?

```
{
  int s;
  scanf("%d",&s);
  switch( s )
  {case 2:  s--;
   case 3:  s--; break;
   case 1:  s++;
   default: s++;
  }
  printf("s is %d\n",s);
}
```

	inp	out
case 2: s--;	2	0
case 1: s++;	1	3
default: s++;	3	2
	-1	0

5 For Loop [2 points]

What is printed after executing the following code?

```
{
    int i, s;
    s = 1;
    for ( i = s, s++; i<= 10; i++, s++)
        { i++; s++;
          if (i < 4) continue;
            else break;
          printf("i is %d\n",i);
        }
    printf("s is %d\n",s);
}
```

-> 5