Quiz #1

CSE 3320.002

Spring 2015

Name: _____

UTA ID:_____

"I certify that the following work is my work alone and I will follow the highest standards of integrity and uphold the spirit of the Honor Code"

Signature:_____

Directions: This is a closed book, closed notes quiz. Please answer the questions in briefly. Complete sentences are not necessary. Write your answers legibly. Unreadable answers will be counted wrong. You may write on back if needed. Questions are 20 pts a piece.

1. As an operating system developer, what is the benefit of a hardware abstraction layer? For 5 bonus pts. what are the negatives?

2. In CP/M why are the stack and the heap on opposite ends of memory? Why is the OS at the top of upper memory?

3. What is the difference between a microkernel and a monolithic kernel operating system.

4. Using a SIGALRM signal write a program that will wake up every 1 second and print the number of times it has been awakened. No other code is necessary.

```
#include <signal.h>
```

```
int main ()
{
```

```
    while(1){
    }
```

```
    return 0;
}
```

5. Write a signal handler to handle SIGINT. Write the code necessary to install the signal handler. No other code is necessary.

```
#include <signal.h>
```

```
int main ()
{
```

```
    return 0;
}
```