

Quiz #2

CSE 3320.002

Fall 2014

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. Explain how MS-DOS loaded applications in relation to the OS. Why was it a problem with its linked applications?
2. Name the four methods to choose which memory hole to fill when an application is loading. Just list the names. You do not need to describe how they work.

3. For the following code, write the output.:

```
child_pid = fork();
if (child_pid == 0)
{
    child_pid = fork();
    if( child_pid == 0 )
    {
        printf("Stark\n");
        return 0;
    }
    else
    {
        int status;
        wait(&status);
        printf("Lannister\n");
        return 0;
    }
}
else
{
    int status;
    wait( &status );
    printf("Tyrell\n");
    pid = fork();
    if( pid != 0 )
    {
        int status;
        wait( &status );
        printf("Greyjoy\n");
    }
    else
    {
        printf("Tully\n");
        return 0;
    }
    exit( 0 );
}
```

4. Describe logical addresses and physical addresses.

5. Write a program that will fork two children. One child will run the executable `ls`. The other child will run the executable `pwd`. Both executables are found in `/bin`. The parent will wait until both children are dead and then will exit as well. Do not use `system()`.