長庚大學110學年度第一學期 作業系統 第一次小考 滿分100

系級:　　　　　　　姓名:　　　　　　　學號:

1. The question is on the slide. (50%)
   Statement 1 !
   Statement 2 !
   Statement 4 !
   Statement 5 !
   Statement 3 !
   Statement 4 !
   Statement 5 !
   Statement 5 !

2. Assume that the fork() function is always successful, please provide the output of the following program. (50%)

```c
#include<sys/types.h>
#include<stdio.h>
#include<unistd.h>
int main()
{
    pid_t pid, pid2;
    printf("aaa");
    pid = fork();
    if (pid == 0)
    {
        pid2 = fork();
        if (pid2 == 0)
        {
            printf("bbb");
        }
        else
        {
            wait(NULL);
            printf("ccc");
        }
         printf("ddd");
    }
    else
    {
        wait(NULL);
        printf("fff");
    }
    return 0;
}
```

aaabbbdddcccdddfff

3. 回家作業加分題 (小考成績加40，總分可超過100)