

1. Describe four classes of Exceptions, and show some examples respectively.

2. What is one possible output of the following program?

```
int main()
{
    int x = 3;

    if (fork() != 0)
        printf("x=%d\n", ++x);

    printf("x=%d\n", --x);
    exit(0);
}
```

3. Write the assembly code of the following c code which was written using the waitpid system-level function.

```
int main()
{
    waitpid(-1, NULL, 0);
    exit(0);
}
```

4. What are the three states of a process? And how a state changes to a different state?