Operating System- CS604

Assignment # 1

Spring 2011

Marks: 20

Due Date

Your assignment must be uploaded before or on **April 18, 2011**

Objective

The objective of this assignment is to familiarize with the system calls.

Instructions

- Avoid Plagiarism. No marks will be given in case of cheating or copying from the internet or from other students.

- Submit the assignment through your account on VULMS. No assignment will be accepted through email after the due date.

- If you have any problem related to assignment, feel free to discuss it by email at cs604@vu.edu.pk

Question # 1:

Read the following program carefully and write the output of the program. Explain each line of code according to given numbering.

```
#include <stdio.h>
#include <unistd.h>
#include <stdlib.h>
#include <errno.h>

1……………… int main (void)
                {
                        pid_t  pid;
2………………………  pid = fork();
3…………………………. if (pid > 0)
                        {
                         int i;
4…………………………  for (i = 0; i < 5; i++)
                                {
5………………… ……………        printf(" I AM VU : %d\n", i);
6………………… ……………        sleep(1);
                                }
                        exit(0);
                        }
7………………… ………  else if (pid == 0)
```

```c
                    {
                    int j;
                     for (j = 0; j < 5; j++)
                            {
8……………………………            printf(" I have no child: %d\n", j);
                            sleep(1);
                            }
                    _exit(0);
                    }
                    else
                    {
9…………………………….fprintf(stderr, "can't fork, error %d\n", errno);
10……………… … ………… exit (EXIT_FAILURE);
                    }
            }
```