

**Ahmedabad University**  
**School of Engineering and Applied Science**

**BTech (ICT), Semester – V**  
**Course: 'Operating Systems'**

**Assignment Set – 2, C Programming**

**Instructions**

- **Write and test shell scripts/programs on unix/Linux platform**
- **Last date of submission: Sept. 13, 2016**
- **Teaching Assistant associated with your group will inform you regarding which problems are to be attempted by a student and mode of submission**
- **This assignment should be submitted on individual basis and use submission page at course web site**

1. Write down a program which works like a scientific calculator and performs following operations

- 1) Floating point calculations
- 2) Trigonometric operations
- 3) Logarithms
- 4) Exponent etc.

(Hint : Use awk and bc )

2. Find out following files on your machine.

- a. Biggest file, if more than one exists than list them
- b. Smallest file, if more than one exists than list them

**Process Creation**

3. Run all the programs related to process creation/termination shown in the lectures (Also given at ftp).

4. Create one child process and make sure that child process runs first and then parent executes and vice versa (if it is possible).

5. Create one child process and make it as zombie. (Use sleep(time);)