

**College of Engineering, Pune**  
**Dept of Computer Engineering and Information Technology**  
**Year (Final B.Tech) - 2017**  
**Advanced Unix Programming (AUP)**

**Lab 1**

1. Assume that you have to read 10 characters from the beginning of an existing file and then to write "hello" to the end of the file. Write a program to achieve this without using lseek function.
2. Linux provides a function as given below to truncate file to specific length.  
int truncate (const char \*path, off\_t len); return 0 on success. On error, return -1,  
Write a program to emulate this function. Use cat command to demonstrate.
3. What will be the output for the program with following operation?
  - a. Create a new file "f1" and write "abcde" in it and close
  - b. Open the file "f1" for writing with O\_APPEND flag
  - c. lseek to the beginning of the file
  - d. Replace the existing data in the file with "12345"

Justify your answer.

4. Write a program to create a file with a hole: write any 10 bytes at an offset of 10 and another 10 bytes at an offset of 30. Using "system" function, invoke "od" command and view the contents. Later copy the contents of the file to another file without writing the bytes of 0. Once again verify the contents by invoking "system" with "od".