

Q1-Write programs using system calls (e.g. fork, getpid, getppid and exec). Submit the source code and sample output as a single PDF.

```
1  #include <stdio.h>
2  #include <unistd.h>
3  #include <sys/types.h>
4
5  int main()
6  {
7      int pid = fork();
8      if (pid == 0)
9      {
10         printf("child process: pid =%d, ppid=%d\n",getpid(),
11             getppid());
12         char *args[]={ "ls", "-l", NULL};
13         execvp("ls",args);
14     }
15     else{
16         printf("parent process:pid=%d, ppid=%d\n", getpid(),
17             getppid());
18         wait(NULL);
19     }
20     return 0;
21 }
```

```
Parent process : pid = 1799, ppid = 1798
Child process: pid = 1803, ppid = 1799
total 24
-rwxr-xr-x 1 14063 14063 16968 Jan 28 16:50 a.out
-rwxrwxrwx 1 root   root    419 Jan 28 16:50 main.c

...Program finished with exit code 0
Press ENTER to exit console.
```