

**LAB ASSIGNMENT-III**  
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**COOS:Operating System**

**Use of system calls-fork(),wait(),exec(),getpid(),signal(),exit()**

```
#include <stdio.h>
#include <sys/types.h>
#include <unistd.h>
```

```
int main()
{
    printf("Hello\n");
    fork();
    printf("bye \n");
    return 0;
}
```

- Modify the above code to print 16 times “Hello” with minimum number of forks().
- Get the process ID of child and parent processes.
- Modify the code such that child process execute before parent process.
- Modify the parent and child process code to parent process to print “Hello” and child process to “world” both should be synchronised with wait() and signal().
- Study of all the flavours of exec()-

```
int execl ( const char *path, const char *arg, ... );
int execlp( const char *file, const char *arg, ... );
int execl(  const char *path, const char *arg, ..., char *const envp[] );
int execv ( const char *path, char *const argv[] );
int execvp( const char *file, char *const argv[] );
int execve( const char *file, char *const argv[], char *const envp[] );
```
- With the help of exit() system call exit a process after fix number of intervals.