



1. Fork() command

```
#include<stdio.h>
#include<unistd.h>
#include<sys/types.h>
#include<sys/stat.h>
#include<sys/wait.h>
#include<fcntl.h>
int main()
{
fork();
printf("Child and Parent Process \n");
return 0;
}
```

Output :

```
root@LAPTOP-92POMHL1:~# gcc code.c
root@LAPTOP-92POMHL1:~# ./a.out
Child and parent process
Child and parent process
root@LAPTOP-92POMHL1:~# |
```

2. For multiple fork() commands

```
GNU nano 6.2 terminal_commands.c *
#include <stdio.h>
#include <sys/types.h>
#include <unistd.h>
#include <sys/stat.h>
#include <sys/wait.h>
#include <fcntl.h>
int main() {
fork();
fork();
fork();
printf("Child and parent process\n");
return 0;
}
```

Output :

```
root@LAPTOP-92POMHL1:~# nano fork.c
root@LAPTOP-92POMHL1:~# gcc fork.c
root@LAPTOP-92POMHL1:~# ./a.out
child and parents process
child and parents process
child and parents process
child and parents process
child and parents process
child and parents process
root@LAPTOP-92POMHL1:~# child and parents process
child and parents process
```



3. Printing Parent and child process id through keeping else block on wait()

```
GNU nano 6.2 terminal_commands.c
#include <stdio.h>
#include <sys/types.h>
#include <unistd.h>
#include <sys/stat.h>
#include <sys/wait.h>
#include <fcntl.h>
int main() {
    pid_t q;
    q=fork();
    if(q==1){
        printf("error");
    }
    if(q==0){
        printf("child processid=%d\n",getpid());
        printf("parent processid=%d\n",getpid());
    }
    else {wait(NULL);
        printf("parent id=%d\n",getpid());
        printf("Child id=%d\n",q);
    }
}
```

Output :

```
root@LAPTOP-92POMHL1:~# ./a.out
parent id=6992
child id=0
parent id=6991
child id=0
root@LAPTOP-92POMHL1:~# |
```

4. Printing parent and child process id through keeping if block on sleep()

```
GNU nano 6.2 terminal_commands.c
#include <stdio.h>
#include <sys/types.h>
#include <unistd.h>
#include <sys/stat.h>
#include <sys/wait.h>
#include <fcntl.h>
int main() {
    pid_t q;
    q=fork();
    if(q==1){
        printf("error");
    }
    if(q==0){
        sleep(10);
        printf("child processid=%d\n",getpid());
        printf("parent processid=%d\n",getpid());
    }
    else {
        printf("parent id=%d\n",getpid());
        printf("Child id=%d\n",q);
    }
    printf("similar ids");
}
```

Output :

```
root@LAPTOP-92POMHL1:~# nano fork1.c
root@LAPTOP-92POMHL1:~# gcc fork1.c
root@LAPTOP-92POMHL1:~# ./a.out
parent id=7685
child id=0
similar idsparent id=7686
child id=0
similar idsroot@LAPTOP-92POMHL1:~# |
```

