



P20-0107  
BCS - 4A

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**MUHAMMAD AWAIS**





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(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ vi getids.c
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ gcc -o getids getids.c
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ ./getids
my process ID is 10446
my parent's process ID is 6424
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$
```





```
/* fork: create a new process */
#include <stdlib.h> /* needed to define exit() */
#include <unistd.h> /* needed for fork() */
#include <sys/wait.h> /* needed for wait() */
#include <stdio.h> /* needed for printf() */
int main(int argc, char **argv) {
    int pid; /* process ID */
    pid = fork();
    if (pid == -1) {
        perror("Error");
    }

    if (pid == 0)
    {
        printf ("\nIn Child!\nChild's PID: %d\n", getpid());
    }
    else
    {
        printf ("\nParent!\nParent's PID: %d\n", getpid());
        printf ("Child's PID: %d\n", pid);
    }

    sleep(1);
    exit(0);
}
```

}

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```
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ vi second.c  
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ gcc -o second second.c  
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ ./second
```

```
Parent!  
Parent's PID: 10541  
Child's PID: 10542
```

```
In Child!  
Child's PID: 10542
```

```
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ █
```

```
#include <stdlib.h> /* needed to define exit() */
#include <unistd.h> /* needed for fork() */
#include <stdio.h> /* needed for printf() */
int main(int argc, char **argv) {
    fork();
    fork();
    fork();
    sleep(10000);
    exit(0);
}
```



aetooc@neo: ~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03



```
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ gcc -o forkexample forkexample.c  
(anaconda3)aetooc@neo:~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03$ ./forkexample
```





(anaconda3) aetooc@neo: ~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03\$ ps aux | grep forkexample

aetooc	11206	0.0	0.0	2348	672	pts/0	S+	11:03	0:00	./forkexample
aetooc	11207	0.0	0.0	2348	80	pts/0	S+	11:03	0:00	./forkexample
aetooc	11208	0.0	0.0	2348	80	pts/0	S+	11:03	0:00	./forkexample
aetooc	11209	0.0	0.0	2348	80	pts/0	S+	11:03	0:00	./forkexample
aetooc	11210	0.0	0.0	2348	80	pts/0	S+	11:03	0:00	./forkexample
aetooc	11211	0.0	0.0	2348	80	pts/0	S+	11:03	0:00	./forkexample
aetooc	11212	0.0	0.0	2348	80	pts/0	S+	11:03	0:00	./forkexample
aetooc	11213	0.0	0.0	2348	80	pts/0	S+	11:03	0:00	./forkexample
aetooc	11248	0.0	0.0	9364	816	pts/1	S+	11:03	0:00	grep --color=auto forkexample

(anaconda3) aetooc@neo: ~/1-FAST-NUCES/Semester-IV/OS/Assignment/a03\$