

1. 2016-1

```
001 /* FORK
002  * (c) 2015-2016 M. Anwar Ma'sum and Rahmat M. Samik-Ibrahim
003  * This is a free software ----- Rev. 06 - 01-Apr-2016
004  */
005
006 #include <stdio.h>
007 #include <sys/types.h>
008 #include <unistd.h>
009
010 void main() {
011     pid_t  pid1, pid2, pid3;
012
013     pid1 = pid2 = pid3 = getpid();
014     printf(" 2016  2015  2014--\n=====\n");
015     printf("[%4d] [%4d] [%4d]\n", pid1, pid2, pid3);
016     fork();
017     pid1 = getpid();
018     wait(NULL);
019     pid2 = getpid();
020     if(!fork()) {
021         pid2 = getpid();
022         fork();
023     }
024     pid3 = getpid();
025     wait(NULL);
026     printf("[%4d] [%4d] [%4d]\n", pid1, pid2, pid3);
027 }
```

- (a) (KOLOM) Lingkari tahun angkatan anda berikut ini: (A) 2016 (B) 2015 (C) lainnya.
(b) (BARIS) Lingkari sesuai angka terakhir (paling kanan) dari NPM anda: 0 1 2 3 4 5 6
(c) Harap mengisi (KOLOM:BARIS) dengan 1000
(d) Harap mengisi kolom dan baris lainnya sesuai dengan keluaran program di atas!

NPM	2016	2015	Lainnya
0	[]	[]	[]
1	[]	[]	[]
2	[]	[]	[]
3	[]	[]	[]
4	[]	[]	[]
5	[]	[]	[]
6	[]	[]	[]

Program Code of Processes and Threads	
001 /*	019 #include <sys/wait.h>
002 * (c) 2005-2017 Rahmat M. Samik-Ibrahim	020 #include <stdlib.h>
003 * This is free software. Feel free to copy and/or	021
004 * modify and/or distribute it, provided this	022 void main(void) {
005 * notice, and the copyright notice, are preserved.	023 int firstPID = (int) getpid();
006 * REV02 Wed May 17 16:52:02 WIB 2017	024 int RelPID;
007 * REV00 Wed May 3 17:07:09 WIB 2017	025
008 *	026 fork();
009 * fflush(NULL): flushes all open output streams	027 wait(NULL);
010 * fork(): creates a new process by cloning	028 fork();
011 * getpid(): get PID (Process ID)	029 wait(NULL);
012 * wait(NULL): wait until the child is terminated	030 fork();
013 *	031 wait(NULL);
014 */	032
015	033 RelPID=(int)getpid()-firstPID+1000;
016 #include <stdio.h>	034 printf("RelPID: %d\n", RelPID);
017 #include <unistd.h>	035 fflush(NULL);
018 #include <sys/types.h>	036 }

[illegible]