SEOULTECH
Seoul National University of Science & Technology

Homework Assignments

➢ Homework #09

- Overview

➢ **Released date**: 11/29 (Fri.)
➢ **Due date**: 12/06 (Fri.)
➢ **Where to submit**: to e-class (http://eclass.seoultech.ac.kr)
  - Late submission is not allowed.
➢ **Assigned score**: 1 points

Consider the C code below. Assume all system calls are successful and that all processes run to completion.

```
#include <stdlib.h>

#define NUM_FORKS 4

char array[NUM_FORKS+2];


int pos = 0;


void work(void* id) {
    char writeMe = '0' + *(int*)id;
    array[pos++] = writeMe;
}


int main() {
    char three = '3';
    int i;
    int pid[NUM_FORKS];


    for (i = 0; i < NUM_FORKS; i++) {
        if (!(pid[i] = fork())) {
            work((void*)(&i));
```

```
            exit(0);

        }

        waitpid(pid[i], NULL, 0);

    }


    array[pos++] = three;

    array[pos] = '\0';

    printf("%s", array);

    exit(0);

}
```

A. What is the output to the terminal?

B. Explain the result.