[Programming Assignment#1]

1. Try running the program shown below (add "#include <sys/wait.h>").

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

#define SIZE 5

int nums[SIZE] = {0,1,2,3,4};

int main()
{
int i;
pid_t pid;

   pid = fork();

   if (pid == 0) {
      for (i = 0; i < SIZE; i++) {
         nums[i] *= -i;
         printf("CHILD: %d ",nums[i]); /* LINE X */
      }
   }
   else if (pid > 0) {
      wait(NULL);
      for (i = 0; i < SIZE; i++)
         printf("PARENT: %d ",nums[i]); /* LINE Y */
   }

   return 0;
}
```

Figure What output will be at Line X and Line Y?

Write your C codes using the VI(M) editor in Linux OS. Compile and execute using the command line. Submit the following:

- Screen capture of your final codes using VI(M) editor.

- Screen capture of compilation, execution and command line results.

- Also explain why these results happened.

- Now, delete the line "wait(NULL);" and recompile and run. Again, screen capture compilation, execution and command line results.

- Explain why the second results are different from the first results.

1. Due: **March 31st**. You should submit to Cyber Campus. Regardless of reason, late submissions will be degraded at least **50%**.

2. You should write down your **own** answers, never copy from other texts. Your answers must be in **ENGLISH**!!

3. Copied (from other students, Internet, solutions, textbook)/unnamed submissions will result in **0 points**.

4. Please submit a word(or hwp or pdf) file that includes screen captures and your answers.