## **Practical No. 4: Demonstration of Process Creation (Parent and Child)**

### **Aim:**

To write a C program to demonstrate process creation using fork() system call and distinguish between the parent and child processes.

### **Program Code (gargi.c):**

c

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#include <unistd.h>

#include <stdio.h>

int main() {

int cpr;

cpr = fork();

if (cpr < 0) {

printf("Fork failed to create process\n");

} else if (cpr == 0) {

printf("Process created\n");

printf("Process id of the child process: %d\n", getpid());

printf("Process id of the parent process: %d\n", getppid());

} else {

printf("In parent process\n");

}

return 0;

}

### **Commands Used:**

1. **cat gargi.c** – To display the contents of the C program.
2. **gcc gargi.c -o test** – To compile the program and create an executable named test.
3. **./test** – To execute the compiled program.

### **Sample Output:**

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In parent process

Process created

Process id of the child process: 5725

Process id of the parent process: 1772

### **Conclusion:**

The fork() system call successfully created a child process, and the program correctly displayed the process IDs of both parent and child processes using getpid() and getppid() functions.