

PROGRAM 2:

(i) fork(), getpid(), wait(), exit()

```
#include<stdio.h>
#include<unistd.h>
#include<stdlib.h>

int main()
{
    int x,y;
    x = fork();
    if(x==0){
        printf("PID of child process is %d and its parent is %d\n",getpid(),getppid());
        printf("In child Process X value is %d\n",x);
        exit(0);
    } else {
        wait();
        printf("PID of Parent process is %d and its parent is %d\n",getpid(),getppid());
        printf("In Parent Process X value is %d\n",x);
        y = fork();
        if(y==0){
            printf("PID of child process is %d and its parent is %d\n",getpid(),getppid());
            printf("In child Process X value is %d\n",x);
            exit(0);
        }
        else{
            wait();
            printf("PID of Parent process is %d and its parent is %d\n",getpid(),getppid());
            printf("In Parent Process X value is %d\n",x);
            exit(0);
        }
    }
}
```

(ii) ADD

```
#include<stdio.h>
#include<stdlib.h>
int main(int argc, char *argv[])
{
    int a,b,c;
    a = atoi(argv[1]);
    b = atoi(argv[2]);
    c= a+b;
    printf("The value of argc is %d\n",argc);
    printf("The value of c is %d\n",c);
    exit(0);
}
```

(iii) execl

```
#include<stdio.h>
#include<unistd.h>
#include<stdlib.h>
#include<sys/wait.h>
int main(int argc, char *argv[])
{
    pid_t pid;
    pid = fork();
    if(pid==0){
        printf("Its a child Process\n");
        execl("add","add",argv[1],argv[2], (char *)0);
        exit(0);
    }
    else{
        wait(0);
        printf("Its a Parent Process\n");
        exit(0);
    }
}
```