**PROGRAM**

#include<stdio.h>

#include<sys/types.h>

#include<unistd.h>

void main()

{

pid\_t pid;

int n,i,sum=0;

printf("Enter the no.of elements\n");

scanf("%d",&n);

pid=fork();

if(pid<0)

{

perror("Fork Error\n");

}

if(pid>0)

{

/\* parent \*/

wait(5);

printf("\nPID :%d\n",pid);

printf("Parent Block ID: %d\n",getpid());

for(i=0;i<n;i++)

{

sum=sum+i;

}

printf("Parent Sum : %d\n",sum);

}

else

{

/\* child \*/

sleep(2);

printf("PID :%d\n",pid);

printf("Child Block ID : %d\n",getpid());

printf("Parent ID Of Child :%d\n",getppid());

for(i=0;i<n;i++)

{

sum=sum-i;

}

printf("Child Difference : %d\n\n",sum);

}

}

**OUTPUT**

**mat@mat-18:~/Desktop/VANISHA46$ gcc fork1.c**

**mat@mat-18:~/Desktop/VANISHA46$ ./a.out**

Enter the no.of elements

10

PID :0

Child Block ID : 2097

Parent ID Of Child :2096

Child Difference : -45

PID :2097

Parent Block ID : 2096

Parent Sum : 45