Task 5. [CO3]: Demonstrate Inter-Process Communication (shared memory, pipes or message queues)

AIM:
To write a program for developing Application using Inter Process communication with pipes.

ALGORITHM:
1. Start the program.
2. Read the input from parent process and perform in child process.
3. Write the date in parent process and read it in child process.
4. Fibonacci Series was performed in child process.
5. Stop the program.

PROGRAM:

```
#include<stdio.h>
#include<unistd.h>
#include<sys/ipc.h>
#include<sys/uio.h>
#include<sys/types.h>
main()
{
int pid,pfd[2],n,a,b,c;
if(pipe(pfd)==-1)
{
printf("\nError in pipe connection\n");
exit(1);
}
pid=fork();
if(pid>0)
{
printf("\nParent Process");\
printf("\n\n\tFibonacci Series");
printf("\nEnter the limit for the series:");
scanf("%d",&n);
close(pfd[0]);
write(pfd[1],&n,sizeof(n));
close(pfd[1]);
exit(0);
}
else
{
close(pfd[1]);
read(pfd[0],&n,sizeof(n));
printf("\nChild Process");
a=0;
b=1;
close(pfd[0]);
printf("\nFibonacci Series is:");
printf("\n\n%d\n%d",a,b);
while(n>2)
{
```

```
c=a+b;
printf("\n%d",c);
a=b;
b=c;
n--;
}
}
}
```

OUTPUT:

```
[root@localhost ~]# ./a.out
Parent Process
Fibonacci Series
Enter the limit for the series:5
Child Process
Fibonacci Series is:
01123
```