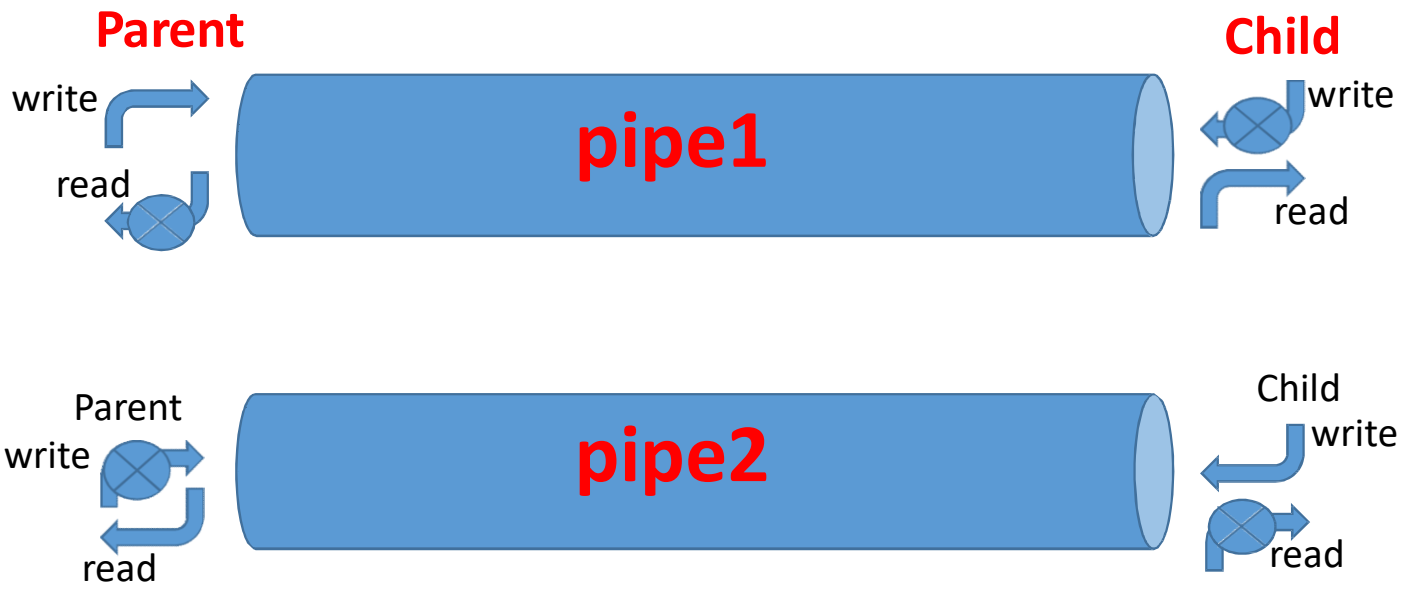
Pipe

IPC

IPC- pipe()


Parent
Child
write
read
pipe1
write
read
Parent
write
read
pipe2
Child
write
read

pipe()

```
#include<stdio.h>
#include<unistd.h>
int main() {
  int fds1[2], fds2[2];
  int creationerr,creationerr1;
  int pid;
  char pipe1writemessage[20] = "Hi";
  char pipe2writemessage[20] = "Hello";
  char  readmessage[20];
 creationerr=  pipe(fds1);
 if (creationerr == -1) {
    printf("Unable to create pipe 1 \n");
    return 1;
 }
 creationerr1 = pipe(fds2);
 if (creationerr1 == -1) {
    printf("Unable to create pipe 2 \n");
    return 1;
 }
pid = fork();
  if (pid != 0)  {
    close(fds1[0]);
    close(fds2[1]);
    printf("In Parent: Writing to pipe 1 – Message is %s\n", pipe1writemessage);
    write(fds1[1],  pipe1writemessage,  sizeof(pipe1writemessage));
    read(fds2[0], readmessage, sizeof(readmessage));
    printf("In Parent: Reading from pipe 2 – Message is %s\n", readmessage);
  } else {
    close(fds1[1]);
    close(fds2[0]);
    read(fds1[0], readmessage, sizeof(readmessage));
    printf("In Child: Reading from pipe 1 – Message is %s\n", readmessage);
    printf("In Child: Writing to pipe 2 – Message is %s\n", pipe2writemessage);
    write(fds2[1], pipe2writemessage, sizeof(pipe2writemessage));
  }
  return 0;
}
```