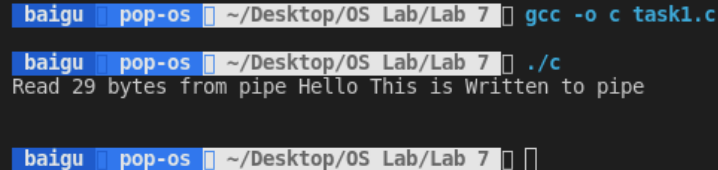


Task1

```
#include <stdlib.h>
#include <unistd.h>
#include <string.h>
#include <stdio.h>
int main ( ) {
    int n ;
    int fd [2] ;
    char buf [1025] ;
    char const * data = "Hello This is Written to pipe" ;
    pipe(fd) ;
    write(fd[1],data, strlen(data)) ;
    if ((n=read (fd[0],buf,1024))>=0){
        buf[n] = 0 ;
        printf( "Read %d bytes from pipe %s \n\n" ,n , buf);
    }
    else {
        perror ( " read " ) ;
        exit(0);
    }
    return 0 ;
}
```



```
baigu pop-os ~/Desktop/OS Lab/Lab 7 gcc -o c task1.c
baigu pop-os ~/Desktop/OS Lab/Lab 7 ./c
Read 29 bytes from pipe Hello This is Written to pipe
baigu pop-os ~/Desktop/OS Lab/Lab 7
```

Task2

```
#include <iostream>
#include <stdlib.h>
#include <unistd.h>
#include <stdio.h>
using namespace std ;
int main (){
    char buffer[10] ;
    cout<<" Enter string :"<<endl;
    read (0, buffer,10 );
    write (1, buffer,10 );
    return 0 ;
}
```

```
baigu pop-os ~/Desktop/OS Lab/Lab 7 ./a.out
Enter string :
ahmed
ahmed
?
```

Task3

```
#include <unistd.h>
#include <stdio.h>
#include <stdlib.h>
#include <sys/wait.h>
int main ()
{
    printf("\n");
    int fd[2] ;
    pid_t childpid ;
    char string[] = " Hello world\n" ;
    char readbuffer[80];
    int result = pipe ( fd ) ;
    if ( result < 0 ){
        printf(" Error while creating file \n") ;
        exit (1) ;
    }

    childpid = fork ( ) ;
    if ( childpid == -1){
        printf(" Error in fork \n");
        exit(1) ;
    }
    if ( childpid == 0 ){
        close ( fd [0] ) ;
        printf(" Child writing to the pipe \n") ;
        write ( fd [ 1 ] , string , sizeof( string ) ) ;
        printf(" Written to a file \n") ;
        exit (0) ;
    }
    else {
        close ( fd[1] ) ;
        wait (NULL) ;
        printf(" Parent reading from the pipe \n") ;
        read ( fd[0] , readbuffer , sizeof(readbuffer) ) ;
        printf(" Received string :%s \n", readbuffer);
    }
}
```

```
exit ( 0 ) ;  
}  
return 0 ;  
}
```

```
baigu pop-os ~/Desktop/OS Lab/Lab 7 gcc -o c task3.c
```

```
baigu pop-os ~/Desktop/OS Lab/Lab 7 ./c
```

```
Child writing to the pipe  
Written to a file  
Parent reading from the pipe  
Received string : Hello world
```

```
baigu pop-os ~/Desktop/OS Lab/Lab 7
```