**PROGRAM**

#include<stdio.h>

#include<sys/types.h>

#include<unistd.h>

#define size 20

int pd[2],n;

void main()

{

int k,i,a[10];

printf("Enter The No.Of Elements\n");

scanf("%d",&n);

printf("Enter The Numbers\n");

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

{

scanf("%d",&a[i]);

}

k=pipe(pd);

if(k==-1)

printf("pipe creation failed\n");

if(fork()==0)

child(pd,a);

else

parent(pd);

}

child(int pd[2],int a[10])

{

close(pd[0]);

int i;

char line[20];

printf("\nChild :\n");

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

{

sprintf(line,"%d",a[i]);

write(pd[1],line,size);

}

}

parent(int pd[2])

{

wait(5);

close(pd[1]);

int i,b[20],d,flag=0,c[20],k=0;

char buffer[20];

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

{

read(pd[0],buffer,size);

sscanf(buffer,"%d",&b[i]);

}

printf("\nParent :\n");

printf("\nPrime Numbers Are :\n");

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

{

for(d=2;d<b[i];d++)

{

if(b[i]%d==0)

{

flag=0;

break;

}

else

{

flag=1;

}

}

if(flag==1)

{

printf("%d\n",b[i]);

}

else

{

c[k]=b[i];

k++;

}

}

printf("\nNon Prime Numbers :\n");

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

printf("%d\n",c[i]);

}

**OUTPUT**

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

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

Enter The No.Of Elements

5

Enter The Numbers

3 4 5 6 7

Child :

Parent :

Prime Numbers Are :

3

5

7

Non Prime Numbers :

4

6