**PROGRAM**

#include<stdio.h>

#include<sys/types.h>

#include<unistd.h>

void main()

{

pid\_t pid;

int i,j,m,n,sum=0,sum1=0,a[10][10],q=0,p=0;

printf("\nEnter The No.of Rows and No.Of Columns\n");

scanf("%d%d",&m,&n);

p=m;

printf("Enter The Elements\n");

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

{

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

{

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

}

}

printf("\n");

pid=fork();

if(pid<0)

{

perror("Fork error");

}

if(pid>0)

{

wait(5);

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

printf("\nRow Sum :\n");

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

{

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

{

printf("%d ",a[i][j]);

sum=sum+a[i][j];

}

printf("%d ",sum);

printf("\n");

sum=0;

}

}

else

{

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

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

printf("\nColumn Sum :\n");

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

{

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

{

sum1=sum1+a[j][i];

}

a[m][q]=sum1;

q++;

printf("\n");

sum1=0;

}

printf("\n");

for(i=0;i<m+1;i++)

{

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

{

printf("%d ",a[i][j]);

}

printf("\n");

}

}

}

**OUTPUT**

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

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

Enter The No.of Rows and No.Of Columns

3 3

Enter The Elements

1 2 3 4 5 6 7 8 9

Child Block ID :2112

Parent ID Of Child :2111

Column Sum :

1 2 3

4 5 6

7 8 9

12 15 18

Parent Block ID :2111

Row Sum :

1 2 3 6

4 5 6 15

7 8 9 24