

CODE:

```
#include <stdlib.h>
#include <stdio.h>
#include <unistd.h>
#include <sys/types.h>

int main(){

    int val1;

    int val2;

    printf("Enter First Number: ");

    scanf("%d", &val1);

    printf("Enter Second Number: ");

    scanf("%d",&val2);

    pid_t C_a,C_b,C_a1,C_b1;

    printf("\n Parent Process with ID %d \n",getpid());

    printf("First number: %d\n",val1);

    printf("Second number: %d\n",val2);

    C_a=fork();

    if (C_a == 0 ) {

        printf("\nChild C1 with PID %d and Parent ID is %d\n",getpid(),getppid());

        int c = val1+val2;

        printf("Add: %d\n",c);

        C_a1=fork();

        if (C_a1 == 0 ) {

            printf("\nChild C11 with PID %d and Parent ID is %d\n",getpid(),getppid());

            int e = val1*val2;

            printf("Multiply: %d\n",e);

        } }

    else{

        C_b = fork();

        if (C_b == 0){

            printf("\nChild C2 with ID %d and Parent ID is %d\n",getpid(),getppid());

            int d = val1-val2;

            printf("Subtract: %d\n",d);

            C_b1=fork();

            if (C_b1 == 0 ){
```

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printf("\nChild C21 with PID %d and Parent ID is %d\n",getpid(),getppid());

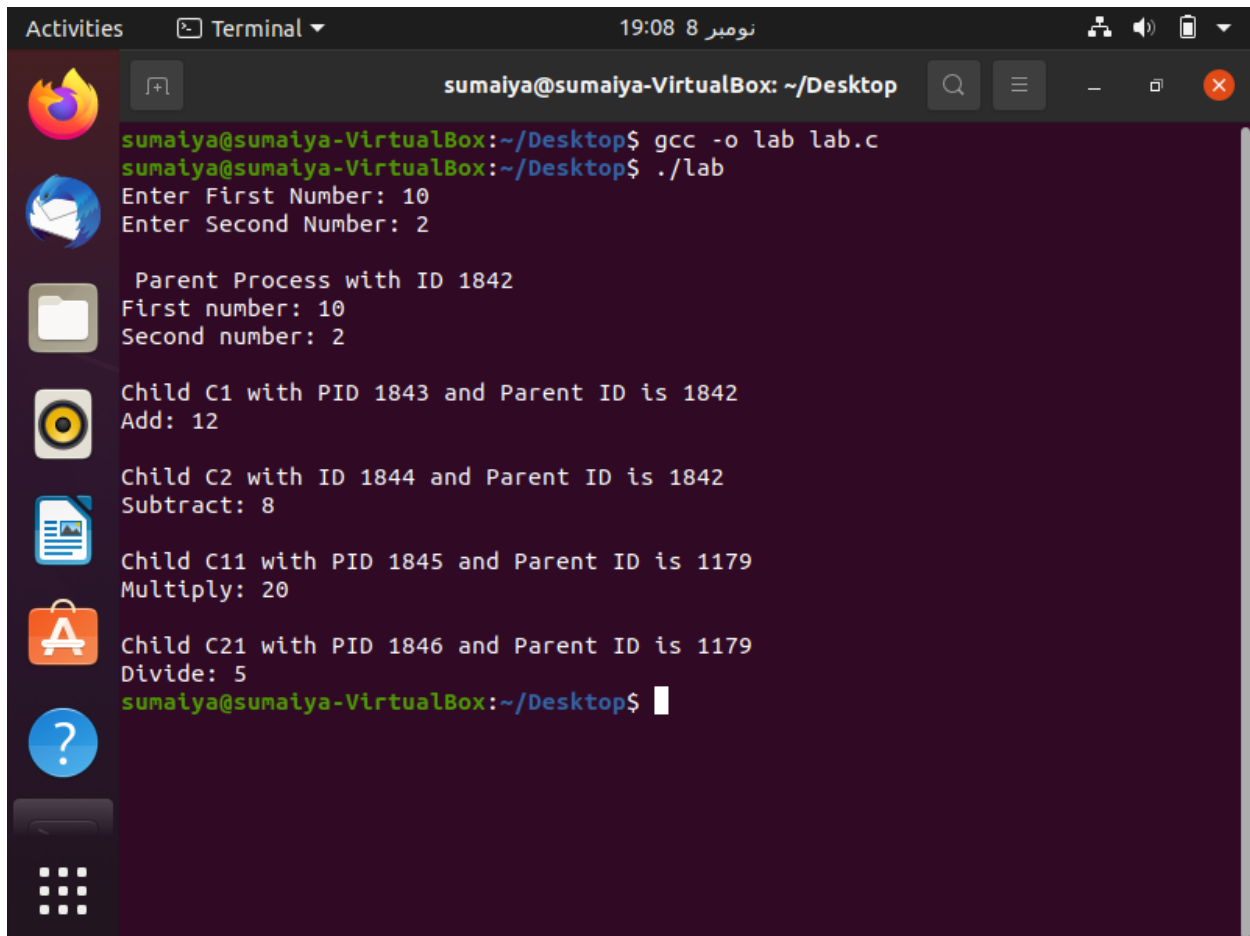
int f = val1/val2;

printf("Divide: %d\n",f);
}
}

else{
sleep(1);
}
}
}

```

OUTPUT:



```

sumaiya@sumaiya-VirtualBox: ~/Desktop
sumaiya@sumaiya-VirtualBox:~/Desktop$ gcc -o lab lab.c
sumaiya@sumaiya-VirtualBox:~/Desktop$ ./lab
Enter First Number: 10
Enter Second Number: 2

Parent Process with ID 1842
First number: 10
Second number: 2

Child C1 with PID 1843 and Parent ID is 1842
Add: 12

Child C2 with ID 1844 and Parent ID is 1842
Subtract: 8

Child C11 with PID 1845 and Parent ID is 1179
Multiply: 20

Child C21 with PID 1846 and Parent ID is 1179
Divide: 5
sumaiya@sumaiya-VirtualBox:~/Desktop$

```