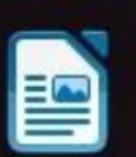




sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~/parinita_1086_os/exp_2a.c

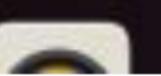
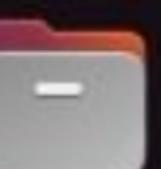
```
#include <stdio.h>
int main() {
    int year;
    printf("Enter year: ");
    scanf("%d", &year);
    if (year%400 == 0) {
        printf("Leap Year");
    }
    else if (year%100 == 0) {
        printf("Not a leap year");
    }
    else if (year%4==0) {
        printf("Leap year");
    }
    else {
        printf("Not a leap year");
    }
    return 0;
}
```



Activities

Terminal

Jan 28 02:32



```
#include <stdio.h>
int main() {
    int n = 2;
    switch (n) {
        case 1: printf("One"); break;
        case 2: printf("Two"); break;
        case 3: printf("Invalid");
    }
    return 0;
}
```

sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~/parinita_1086_os/exp_2a.c/exp_2b.c



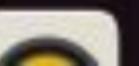
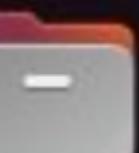
```
#include <stdio.h>
int main() {
int n, a=0, b = 1, c;
printf("Enter number of terms: ");
scanf("%d", &n);
for(int i = 1; i <=n; i++){
printf("%d ", a);
c = a+b;
a=b;
b=c;
}
return 0;
}
```



sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c

Activities

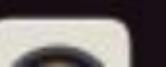
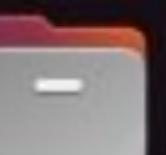
→ Terminal



```
#include <stdio.h>
int main() {
    int i = 1;
    while (i<=5) {
        printf("%d\n",i);
        i++;
    }
    return 0;
}
```

Activities

Terminal



```
#include <stdio.h>
int main() {
    int i = 1;
    do {
        printf("%d", i);
        i++;
    } while (i<=5);
    return 0;
}
```



sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c/exp_2e.c

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ mkdir parinita_1086_os
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ cd parinita_1086_os
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os$ mkdir exp_2a.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os$ cd exp_2a.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c$ vi exp_2a.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c$ gcc exp_2a.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c$ ./a.out
```

Enter year: 2025

Not a leap year

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c$ mkdir exp_2b.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c$ cd exp_2b.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c$ vi exp_2b.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c$ gcc exp_2b.c
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c$ ./a.out
```

Two

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c$ mkdir exp_2c.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c$ cd exp_2c.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c$ vi exp_2c.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c$ gcc exp_2c.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c$ ./a.out
```

Enter number of terms: 3

```
0 1 1 sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c$ mkdir exp_2d.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c$ cd exp_2d.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c$ vi exp_2d.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c$ gcc exp_2d.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c$ ./a.out
```

1

2

3

4

5

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c$ mkdir exp_2e.c
```

Command 'mkdir' not found, did you mean:

command 'mkdir' from deb coreutils (8.32-4.1ubuntu1.2)

command 'mdir' from deb mtools (4.0.33-1+really4.0.32-1build1)

Try: sudo apt install <deb name>

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c$ mkdir exp_2e.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c$ cd exp_2e.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c/exp_2e.c$ vi exp_2e.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c/exp_2e.c$ gcc exp_2e.c
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c/exp_2e.c$ ./a.out
```

```
12345sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~/parinita_1086_os/exp_2a.c/exp_2b.c/exp_2c.c/exp_2d.c/exp_2e.c$ █
```



sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ nano processcreation_1086.c  
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ gcc processcreation_1086.c  
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ ./a.out
```

Parent Process Started

Parent PID: 2741

Child PID: 2742

Child PID: 2742

Parent PID: 2742

1086a.c

1086b.c

1086.c

1086c.c

1086_os

a.out

Desktop

Documents

Downloads

Music

panu

parinita_1086_os

Pictures

processcreation_1086.c

Public

snap

Templates

Videos

Child process completed

Parent process exiting

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$
```

sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~

GNU nano 6.2

1086c.c *

```
#include <stdio.h>
int main() {
int n, rev = 0, rem;
printf("Enter number: ");
scanf("%d", &n);
while(n!=0) {
rem = n%10;
rev = rev*10+rem;
n = n/10;
}
printf("Reversed = %d", rev);
return 0;
}
```

sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~

GNU nano 6.2 processcreation_1086.c *

```
#include <stdio.h>
#include <unistd.h>
#include <sys/wait.h>

int main() {
pid_t pid;
printf("Parent Process Started\n");
printf("Parent PID: %d\n", getpid());

pid = fork();

if(pid<0){
printf("Process creation failed\n");
}
else if(pid == 0) {
printf("\nChild PID: %d\n", getpid());
printf("Child PID: %d\n", getpid());
printf("Parent PID: %d\n", getpid());

execl("/bin/ls", "ls", "-1", NULL);
printf("Exec failed\n");
}
else {
wait(NULL);
printf("\nChild process completed\n");
printf("Parent process exiting\n");
}
return 0;
}
```



sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~

GNU nano 6.2

1086b.c *

```
#include <stdio.h>
int main() {
int n, i, flag = 0;
printf("Enter number : ");
scanf("%d", &n);
for(i=2; i < n; i++){
if(n%i==0) {
flag = 1;
break;
}
}
if (flag == 0) {
printf("Prime");
}
else {
printf("Not prime");
}
return 0;
}
```



sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ nano 1086.c  
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ gcc 1086.c  
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ ./a.out
```

Enter value of a: 4

Enter value of b: 3

Addition is : 7 Subtraction is : 1 Multiplication is : 12 Division is : 1 sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~\$ nano 1086a.c

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ gcc 1086a.c  
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ ./a.out
```

Enter a number : 3

Factorial is : 6 sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~\$ nano 1086b.c

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ gcc 1086b.c  
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ ./a.out
```

Enter number : 6

Not prime sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~\$ nano 1086c.c

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ gcc 1086c.c  
1086c.c: In function 'main':  
1086c.c:4:1: warning: implicit declaration of function 'preintf'; did you mean 'printf'? [-Wimplicit-function-declaration]  
 4 | preintf("Enter number: ");  
   | ^~~~~~  
   | printf
```

```
/usr/bin/ld: /tmp/ccPCDBl8.o: in function 'main':  
1086c.c:(.text+0x32): undefined reference to 'preintf'  
collect2: error: ld returned 1 exit status
```

```
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ nano 1086c.c  
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ gcc 1086c.c  
sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~$ ./a.out
```

Enter number: 789

Reversed = 987 sit@sit-HP-Pavilion-Laptop-15-eh1xxx:~\$ █

sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~

GNU nano 6.2

1086a.c *

```
#include <stdio.h>
int main() {
int n, i;
int fact = 1;
printf("Enter a number : ");
scanf("%d", &n);

for(int i = 1; i <= n; i++) {
fact = fact*i;
}
printf("Factorial is : %d", fact);
return 0;
}
```



sit@sit-HP-Pavilion-Laptop-15-eh1xxx: ~

GNU nano 6.2

1086.c

```
#include <stdio.h>
int main() {
int a, b, add, sub, mul, div;
printf("Enter value of a: ");
scanf("%d", &a);
printf("Enter value of b: ");
scanf("%d", &b);
add = a+b;
sub = a-b;
mul = a*b;
div = a/b;

printf("Addition is : %d", add);
printf("Subtraction is : %d", sub);
printf("Multiplication is : %d", mul);
printf("Division is : %d", div);
return 0;
}
```