GDB online Debugger | Compiler | Online PDF Converter - Merge, c | Day 3 Lab Programs and Output | Upload files · 1Yamini/CSA0465-C

onlinegdb.com

Gmail YouTube Maps

OnlineGDB beta
online compiler and debugger for c/c++

Welcome, yamini

dining philosophers

Create New Project
My Projects
Classroom new
Learn Programming
Programming Questions
Logout

174K

Run | Debug | Stop | Share | Saved | { } Beautify | Language C

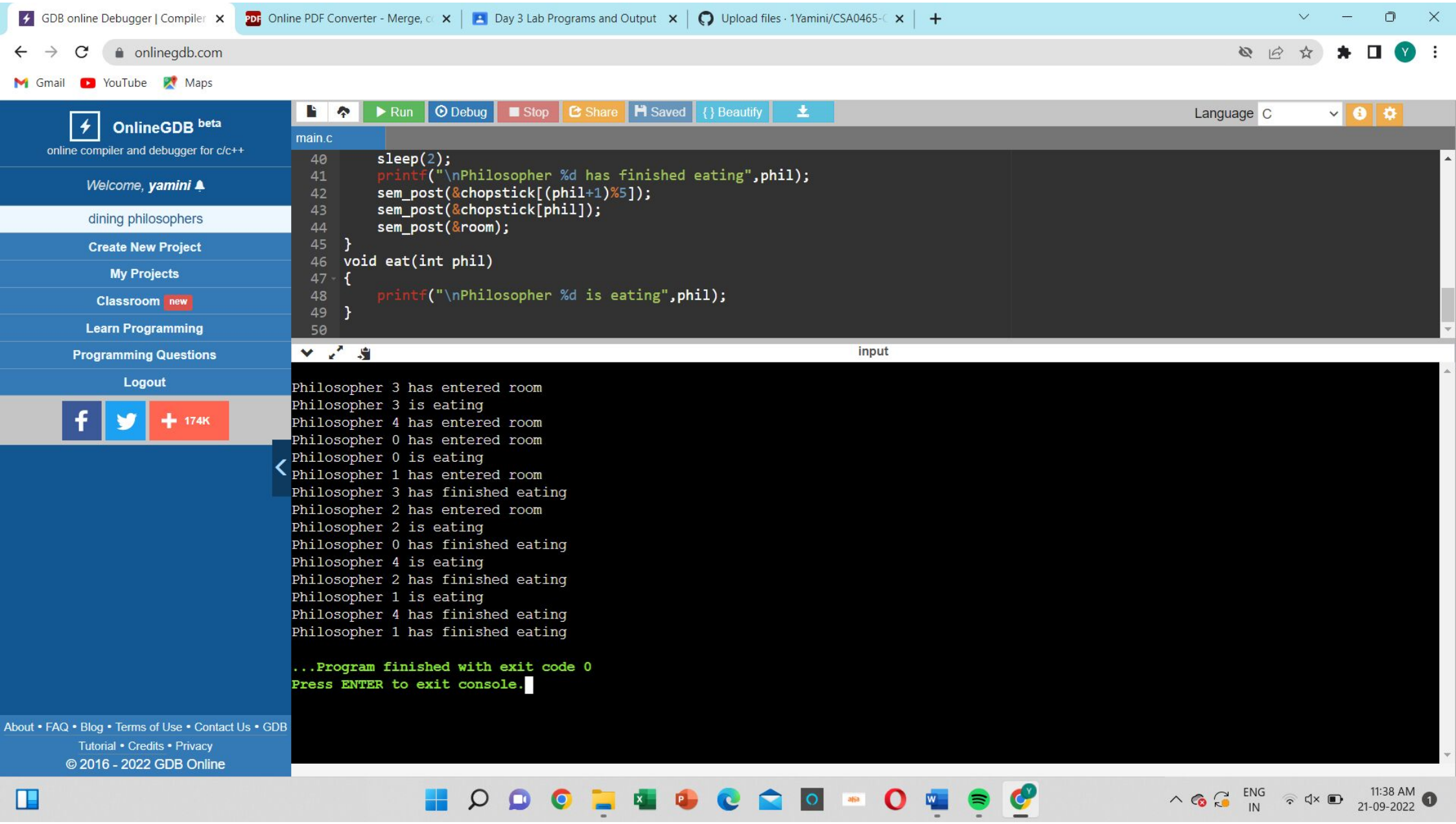
main.c

```c
#include<stdio.h>
#include<stdlib.h>
#include<pthread.h>
#include<semaphore.h>
#include<unistd.h>
sem_t room;
sem_t chopstick[5];
void * philosopher(void *);
void eat(int);
int main()
{
    int i,a[5];
    pthread_t tid[5];
    sem_init(&room,0,4);
    for(i=0;i<5;i++)
        sem_init(&chopstick[i],0,1);
    for(i=0;i<5;i++){
        a[i]=i;
        pthread_create(&tid[i],NULL,philosopher,(void *)&a[i]);
    }
    for(i=0;i<5;i++)
        pthread_join(tid[i],NULL);
}
void * philosopher(void * num)
{
    int phil=*(int *)num;
    sem_wait(&room);
    printf("\nPhilosopher %d has entered room",phil);
    sem_wait(&chopstick[phil]);
    sem_wait(&chopstick[(phil+1)%5]);
    eat(phil);
    sleep(2);
    printf("\nPhilosopher %d has finished eating",phil);
    sem_post(&chopstick[(phil+1)%5]);
    sem_post(&chopstick[phil]);
```

input

About • FAQ • Blog • Terms of Use • Contact Us • GDB Tutorial • Credits • Privacy

ENG IN 11:38 AM 21-09-2022


GDB online Debugger | Compiler
Online PDF Converter - Merge,
Day 3 Lab Programs and Output
Upload files · 1Yamini/CSA0465-
onlinegdb.com
Gmail
YouTube
Maps
OnlineGDB beta
online compiler and debugger for c/c++
Welcome, yamini
dining philosophers
Create New Project
My Projects
Classroom new
Learn Programming
Programming Questions
Logout
174K
About • FAQ • Blog • Terms of Use • Contact Us • GDB Tutorial • Credits • Privacy
© 2016 - 2022 GDB Online
Run
Debug
Stop
Share
Saved
{} Beautify
Language C
main.c
40 sleep(2);
41 printf("\nPhilosopher %d has finished eating",phil);
42 sem_post(&chopstick[(phil+1)%5]);
43 sem_post(&chopstick[phil]);
44 sem_post(&room);
45 }
46 void eat(int phil)
47 {
48 printf("\nPhilosopher %d is eating",phil);
49 }
50
input
Philosopher 3 has entered room
Philosopher 3 is eating
Philosopher 4 has entered room
Philosopher 0 has entered room
Philosopher 0 is eating
Philosopher 1 has entered room
Philosopher 3 has finished eating
Philosopher 2 has entered room
Philosopher 2 is eating
Philosopher 0 has finished eating
Philosopher 4 is eating
Philosopher 2 has finished eating
Philosopher 1 is eating
Philosopher 4 has finished eating
Philosopher 1 has finished eating
...Program finished with exit code 0
Press ENTER to exit console.
ENG IN
11:38 AM 21-09-2022