
ASSIGNMENT NO:- 01

PROGRAM:

```
#include<stdio.h>
```

```
int sum(int a,int b){ return a+b;  
}  
  
int main(){ int a,b;  
printf("Enter the value of num 1: "); scanf("%d",&a);  
printf("Enter the value of num 2: "); scanf("%d",&b);  
printf("The sum of the given 2 numbers is : %d",sum(a,b));  
}
```

Output:

i)

```
user student can run the following commands with sudo: systemctl apt dpkg docker  
student@cc-91:~/om ppl$ cd expt1  
student@cc-91:~/om ppl/expt1$ gcc expt1.c -o expt1  
student@cc-91:~/om ppl/expt1$ ./expt1  
./expt1: command not found  
student@cc-91:~/om ppl/expt1$ ./expt1  
Enter the value of num 1: 4  
Enter the value of num 2: 32  
The sum of the given 2 numbers is : 36student@cc-91:~/om ppl/expt1$ gcc --save-temps expt1.c  
student@cc-91:~/om ppl/expt1$ ./a.out  
Enter the value of num 1: 53  
Enter the value of num 2: 3  
The sum of the given 2 numbers is : 56student@cc-91:~/om ppl/expt1$ ls  
a-expt1.i a-expt1.o a-expt1.s a.out expt1 expt1.c sc1 sc2  
student@cc-91:~/om ppl/expt1$
```

ii)ppl2.s

```
.file      "ppl2.c"
.text
.globl function
.type function, @function
function:
.LFB0:
.cfi_startproc
endbr64
pushq %rbp
.cfi_def_cfa_offset 16
.cfi_offset 6, -16
movq %rsp, %rbp
.cfi_def_cfa_register 6
subq $32, %rsp
movq %fs:40, %rax
movq %rax, -8(%rbp)
xorl %eax, %eax
nop
movq -8(%rbp), %rax
subq %fs:40, %rax
je .L2
call __stack_chk_fail@PLT
.L2:
leave
.cfi_def_cfa 7, 8
ret
.cfi_endproc
.LFE0:
.size function, .-function
.globl main
.type main, @function
main:
.LFB1:
.cfi_startproc
endbr64
pushq %rbp
.cfi_def_cfa_offset 16
.cfi_offset 6, -16
movq %rsp, %rbp
.cfi_def_cfa_register 6
subq $16, %rsp
movl $1, -12(%rbp)
movl $5, -8(%rbp)
movl $6, -4(%rbp)
movl $0, %eax
call function
```

```

    movl    $0, %eax
    leave
    .cfi_def_cfa 7, 8
    ret
    .cfi_endproc
.LFE1:
    .size main, .-main
    .ident "GCC: (Ubuntu 11.4.0-1ubuntu1~22.04) 11.4.0"
    .section .note.GNU-stack,"",@progbits
    .section .note.gnu.property,"a"
    .align 8
    .long 1f - 0f
    .long 4f - 1f
    .long 5
0:
    .string    "GNU"
1:
    .align 8
    .long 0xc0000002
    .long 3f - 2f
2:
    .long 0x3
3:
    .align 8
4:

```

iv) ppl2.i:

```

# 0 "ppl2.c"
# 0 "<built-in>"
# 0 "<command-line>"
# 1 "/usr/include/stdc-predef.h" 1 3 4
# 0 "<command-line>" 2
# 1 "ppl2.c"
void function()
{
char buff[5];
char buff1[16];
}

int main()
{
int a=1,b=5,c=6;
function();
return 0;
}

```

iv) ppl2.o:

```

GCC: (Ubuntu 11.4.0-1ubuntu1~22.04) 11.4.0 ppl2.c function
__stack_chk_fail
main .symtab .strtab .shstrtab .rela.text .data .bss .comment .note.G
NU-stack .note.gnu.property .rela.eh_frame

```