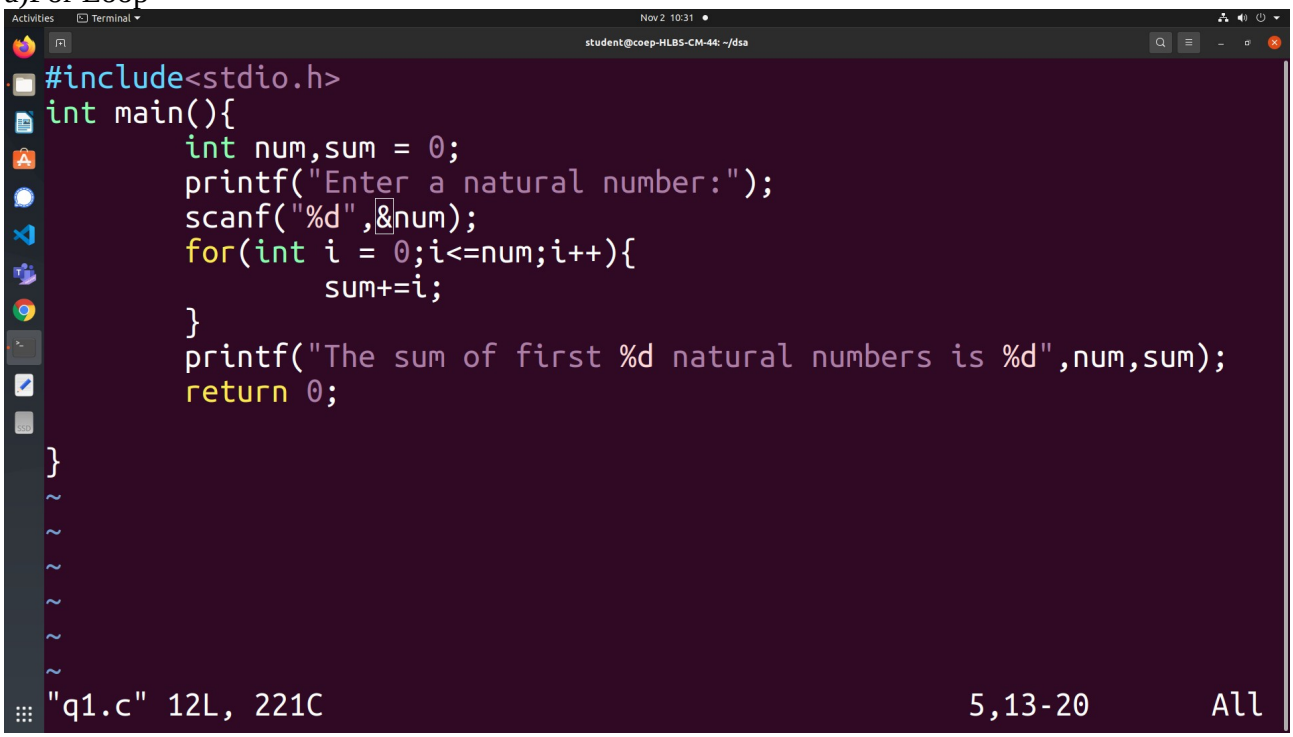
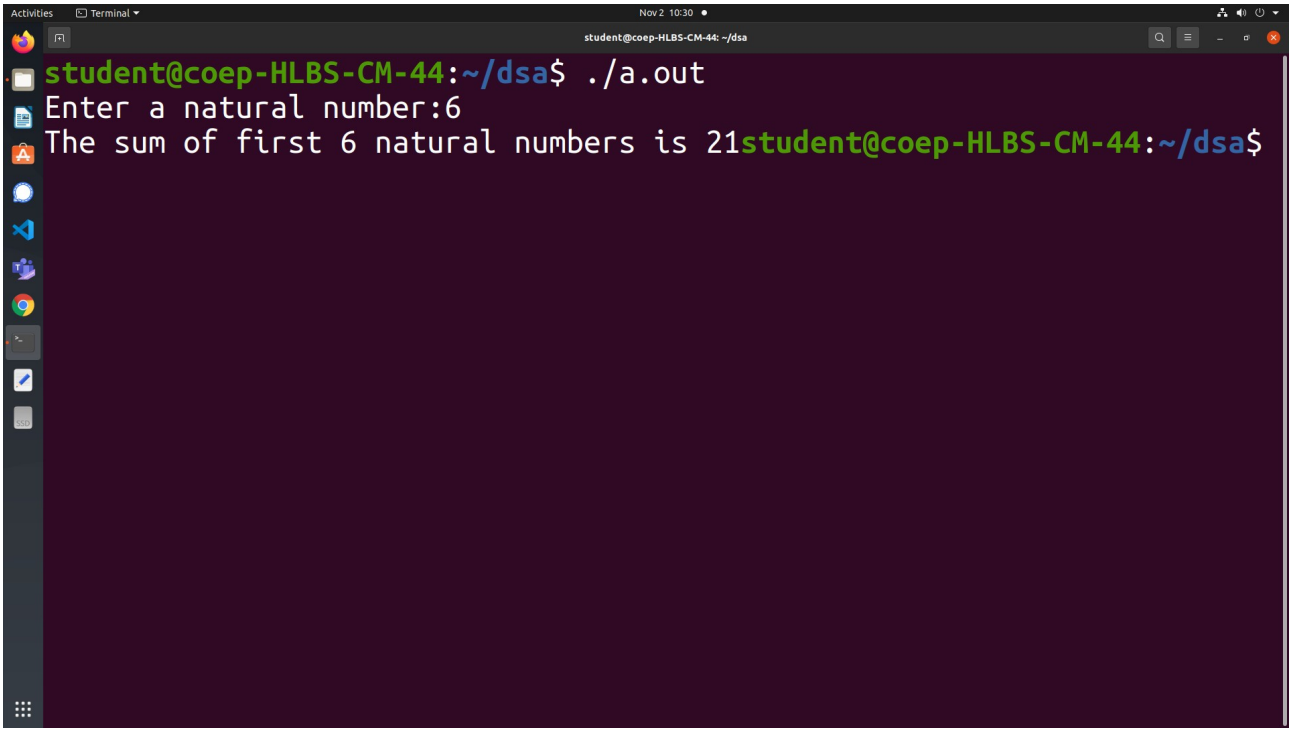
112103084
Arsh Maknojia

Assignment 2

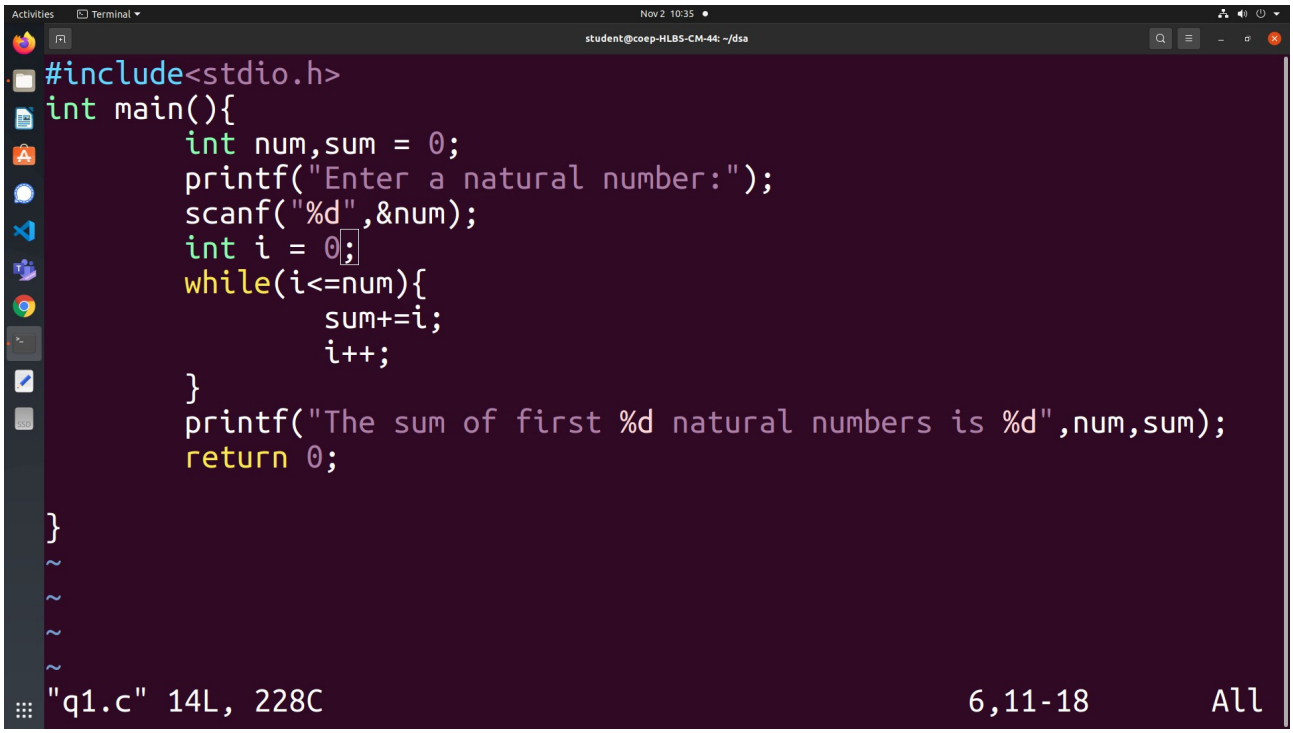
1. Write a program to find sum of natural numbers using

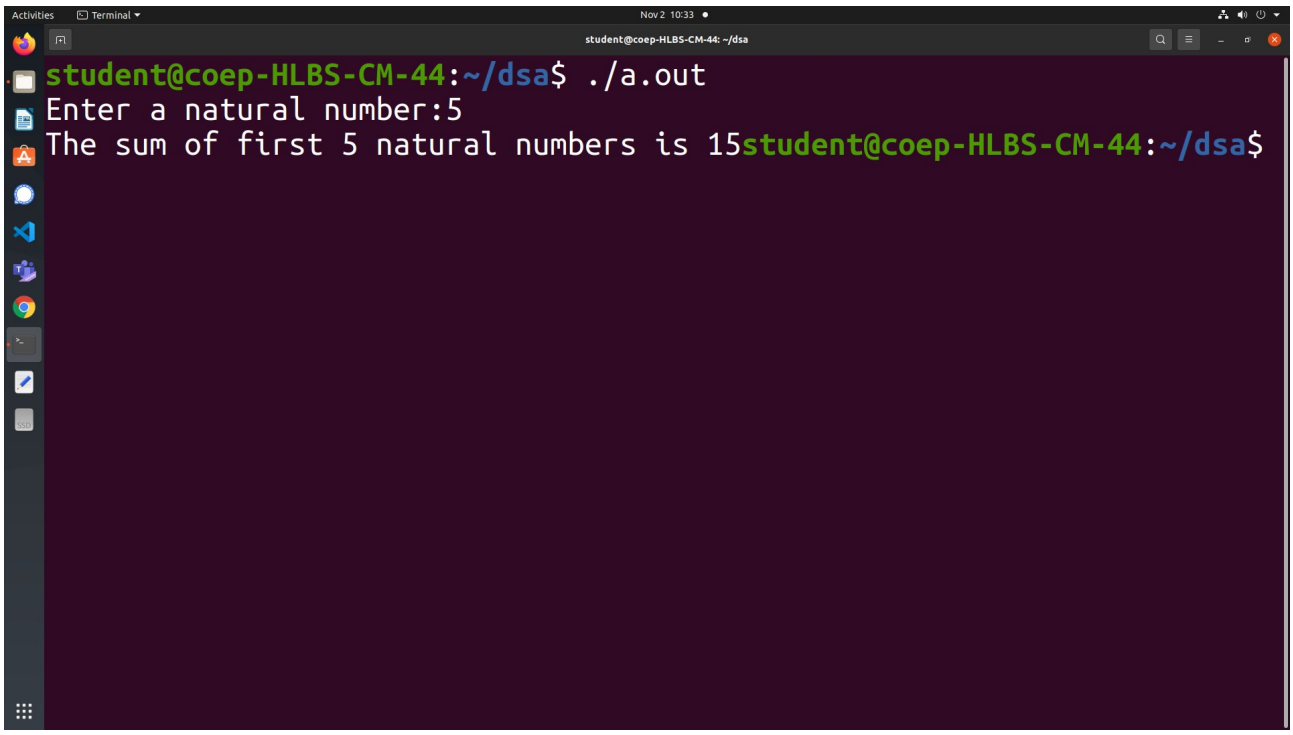
a)For Loop



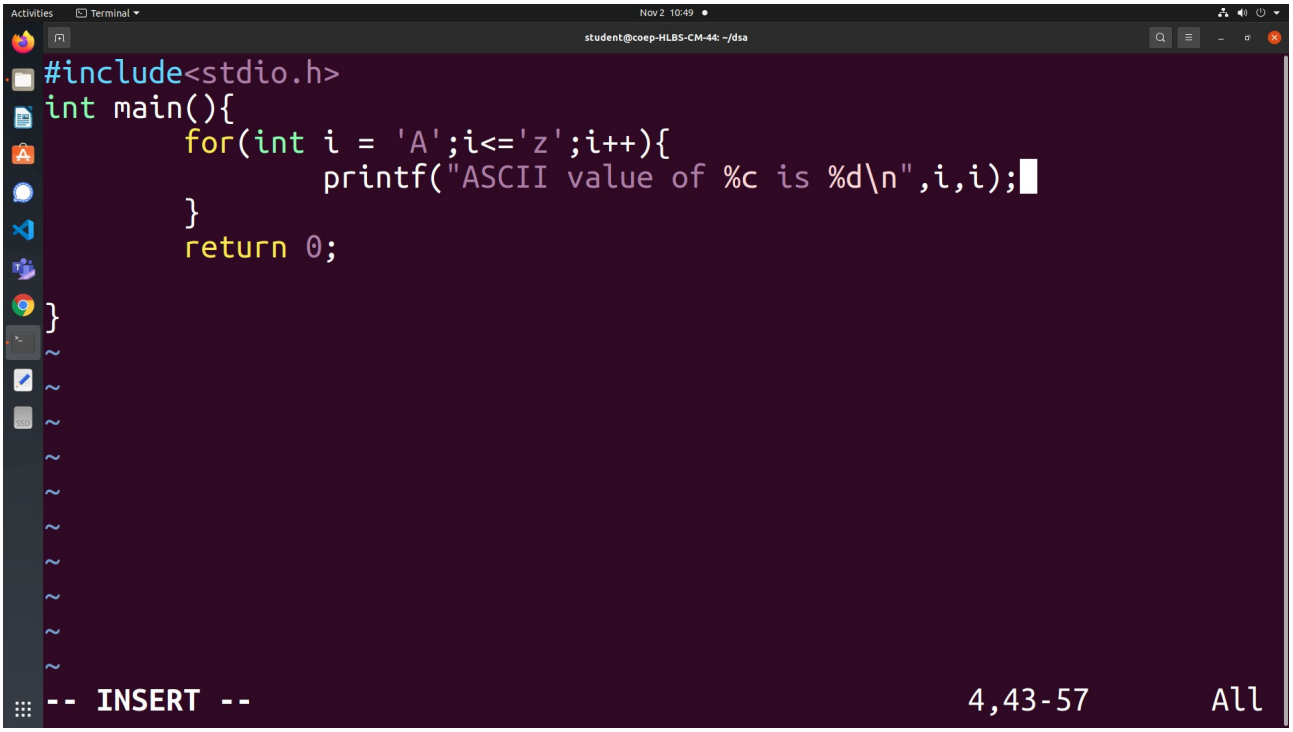


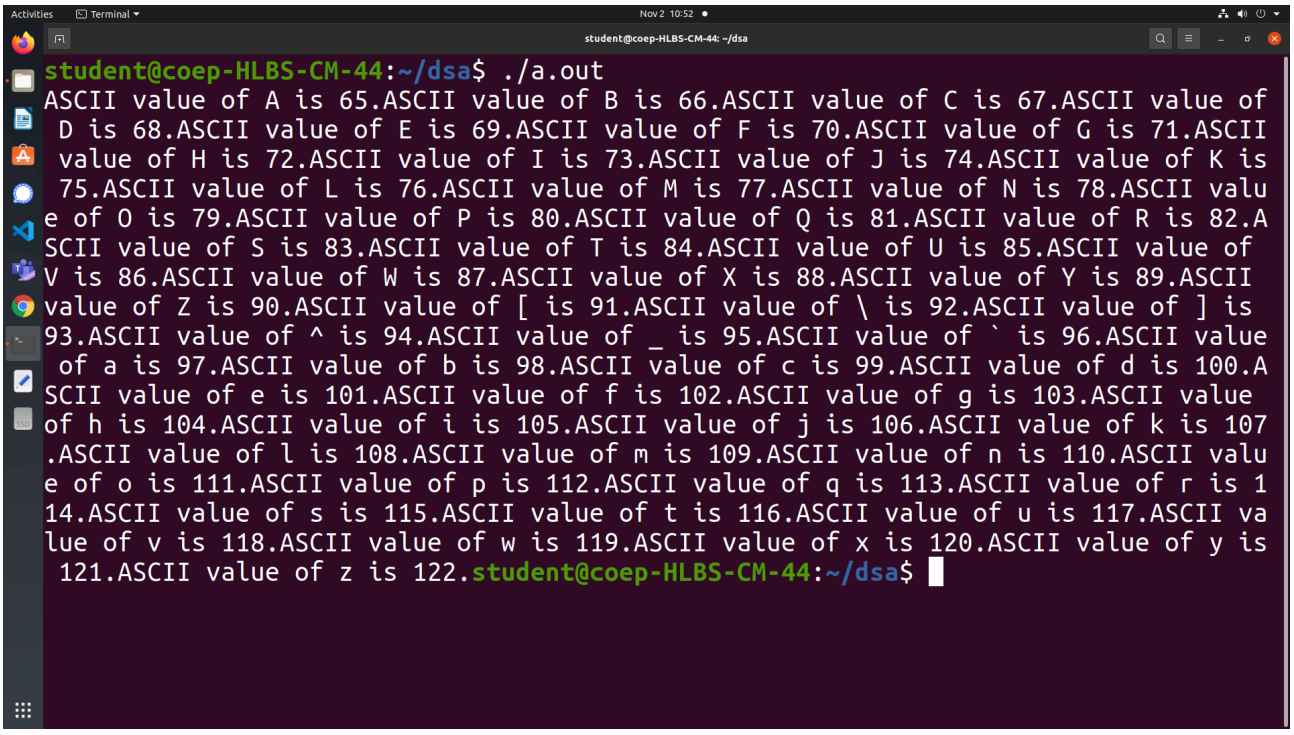
b)While loop


Activities
Terminal
Nov 2 10:35
student@coep-HLBS-CM-44: ~/dsa
#include<stdio.h>
int main(){
int num,sum = 0;
printf("Enter a natural number:");
scanf("%d",&num);
int i = 0;
while(i<=num){
sum+=i;
i++;
}
printf("The sum of first %d natural numbers is %d",num,sum);
return 0;
}
"q1.c" 14L, 228C
6,11-18
All

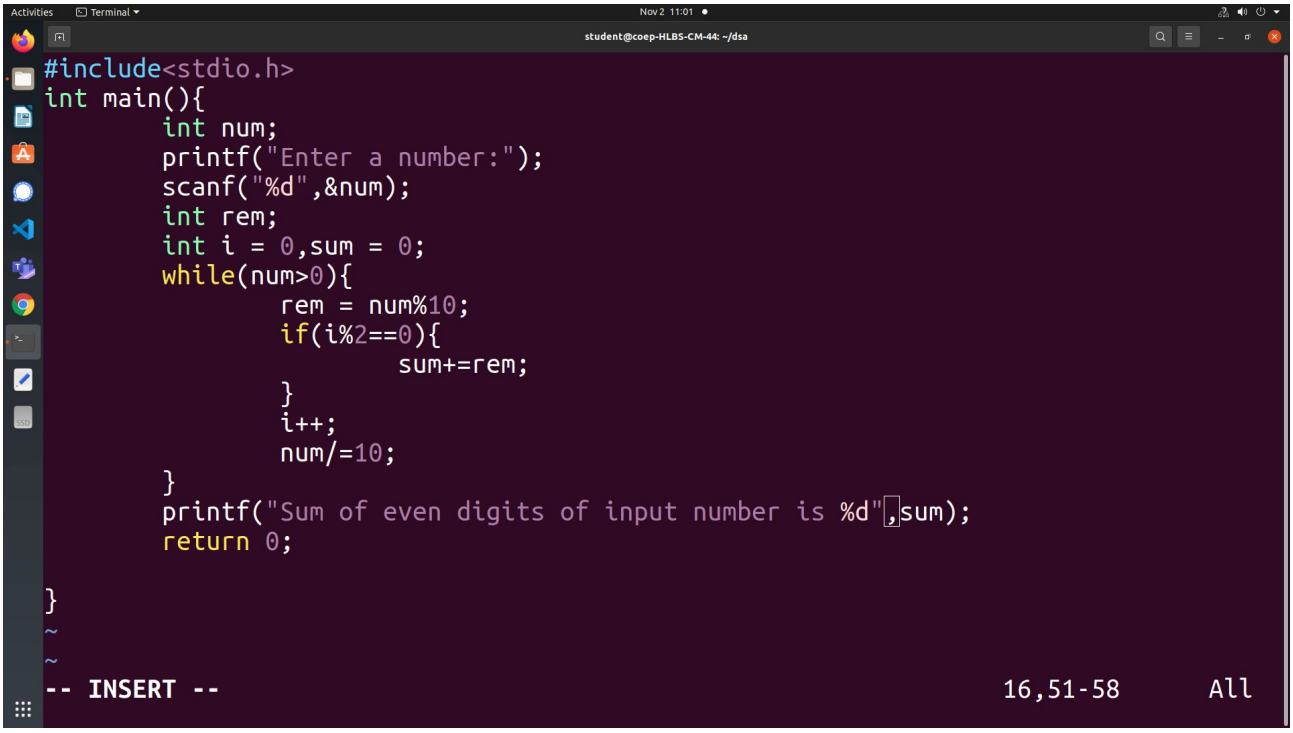

Activities
Terminal
Nov 2 10:33
student@coep-HLBS-CM-44: ~/dsa
student@coep-HLBS-CM-44:~/dsa$ ./a.out
Enter a natural number:5
The sum of first 5 natural numbers is 15student@coep-HLBS-CM-44:~/dsa$

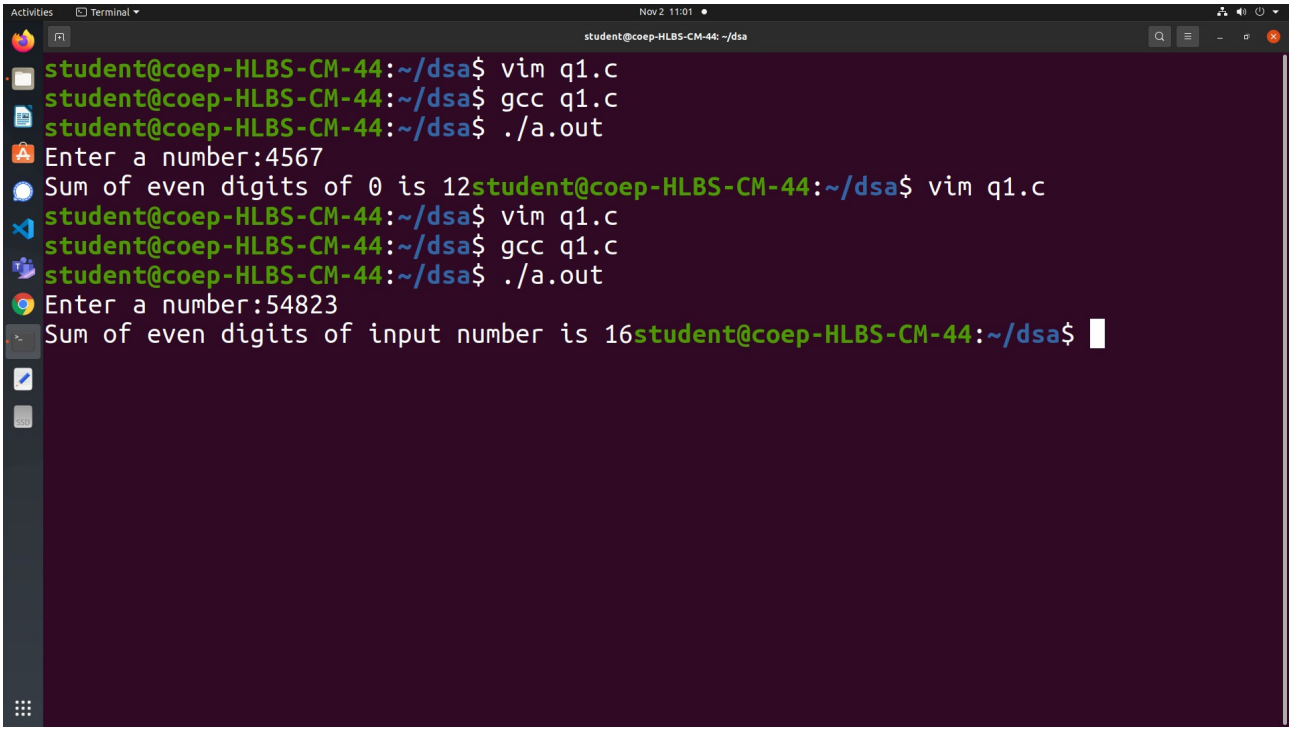
2. Write a C program to print the ASCII value of all alphabets (both lower and upper case) using loop.



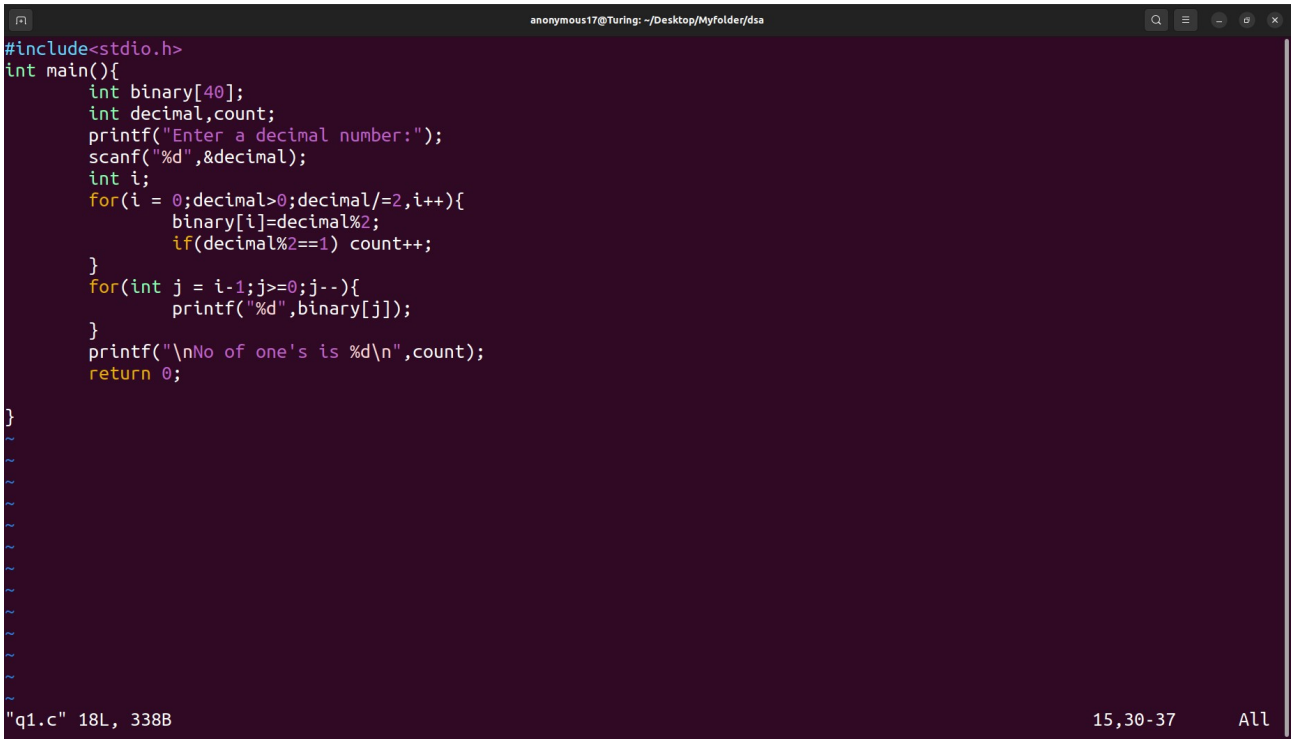


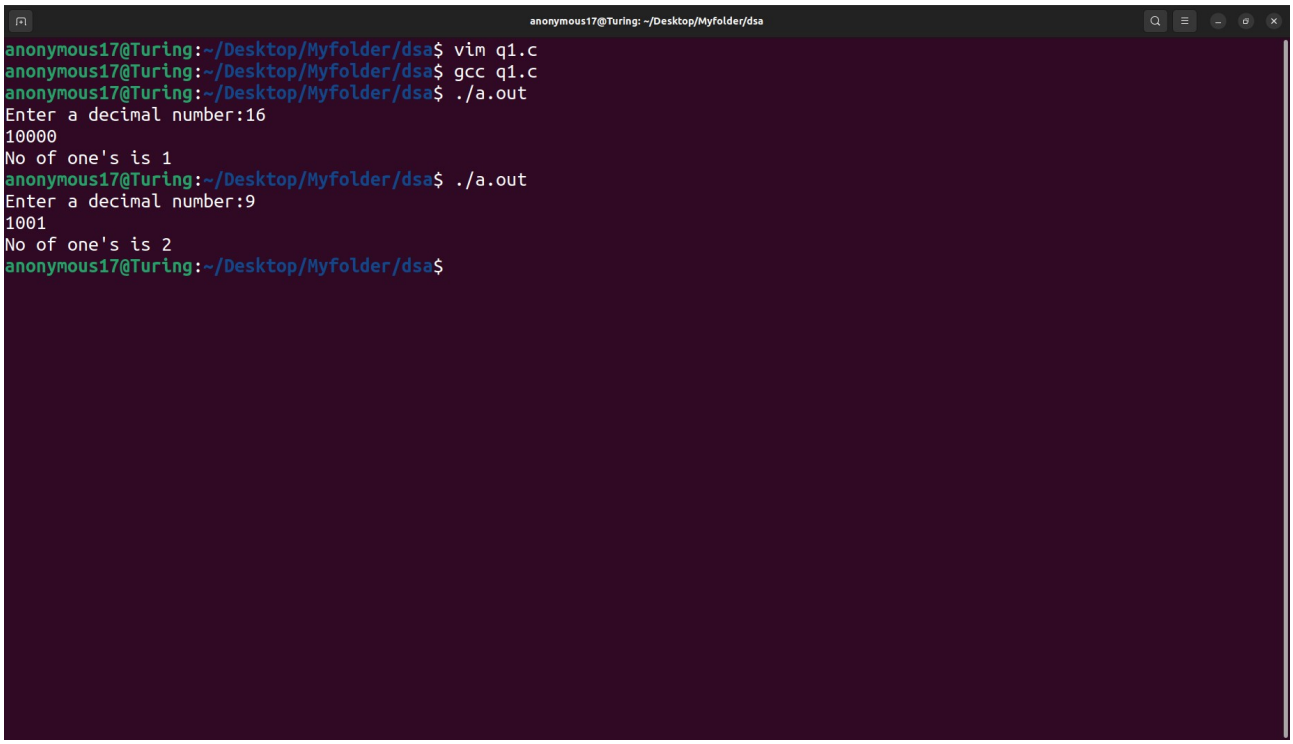
3. Write a C Program to find sum of digits at even location in a given number. Digits are numbered from 0 to n-1 from right to left.



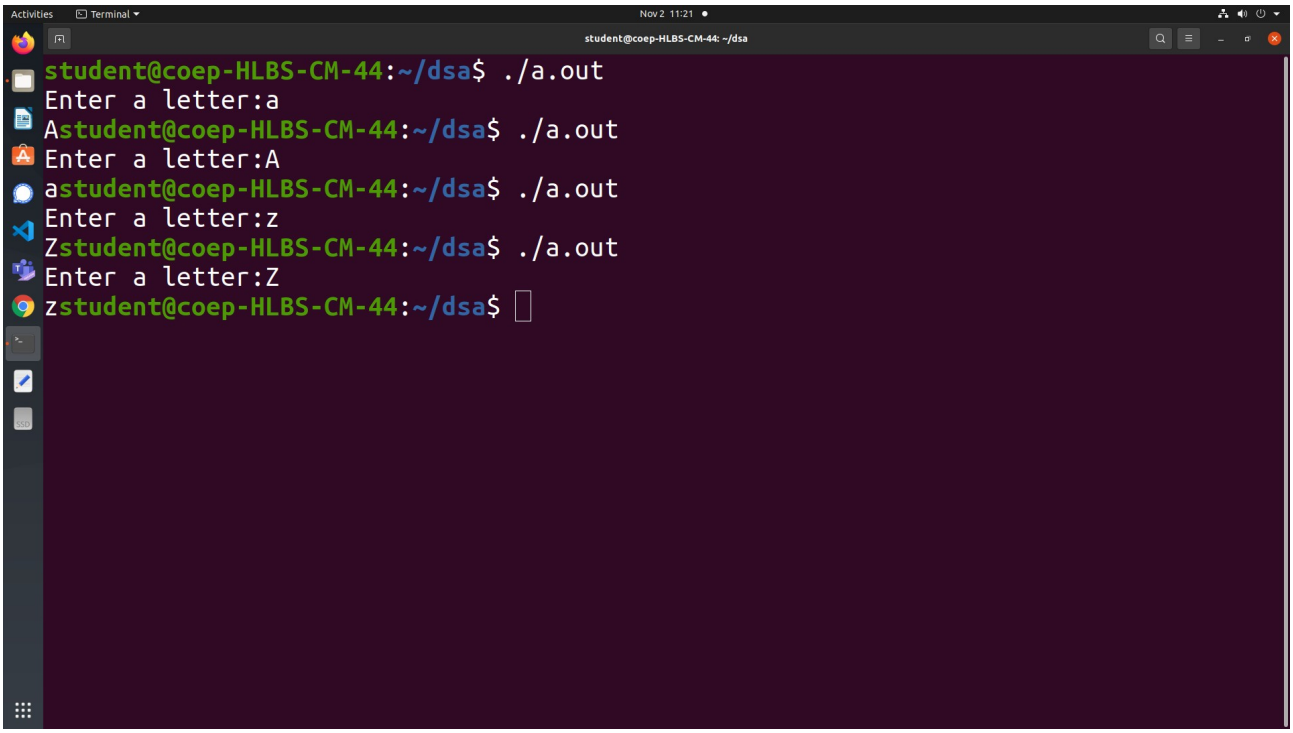


4. Write a C program to accept a decimal number (Base 10) and convert it to binary and count the number of 1's in the binary number.





5. Write a C program to change the case of an alphabet.



8. Write a C program to generate prime number series from 1 to 100.

anonymous17@Turing: ~/Desktop/Myfolder/dsa

```c
#include<stdio.h>
#include<stdbool.h>
int main(){
        bool flag;
        for(int i = 2;i<=100;i++){
                flag = true;
                for(int j = 2;j<=i/2;j++){
                        if(i%j==0){
                                flag = false;
                                break;
                        }
                }
                if(flag){
                        printf("%d is a prime.\n",i);
                }
        }
}
```

-- INSERT -- 17,2 All

anonymous17@Turing: ~/Desktop/Myfolder/dsa

```
anonymous17@Turing:~/Desktop/Myfolder/dsa$ gcc q1.c
anonymous17@Turing:~/Desktop/Myfolder/dsa$ ./a.out
2 is a prime.
3 is a prime.
5 is a prime.
7 is a prime.
11 is a prime.
13 is a prime.
17 is a prime.
19 is a prime.
23 is a prime.
29 is a prime.
31 is a prime.
37 is a prime.
41 is a prime.
43 is a prime.
47 is a prime.
53 is a prime.
59 is a prime.
61 is a prime.
67 is a prime.
71 is a prime.
73 is a prime.
79 is a prime.
83 is a prime.
89 is a prime.
97 is a prime.
anonymous17@Turing:~/Desktop/Myfolder/dsa$
```