

EXPERIMENT 12

AIM

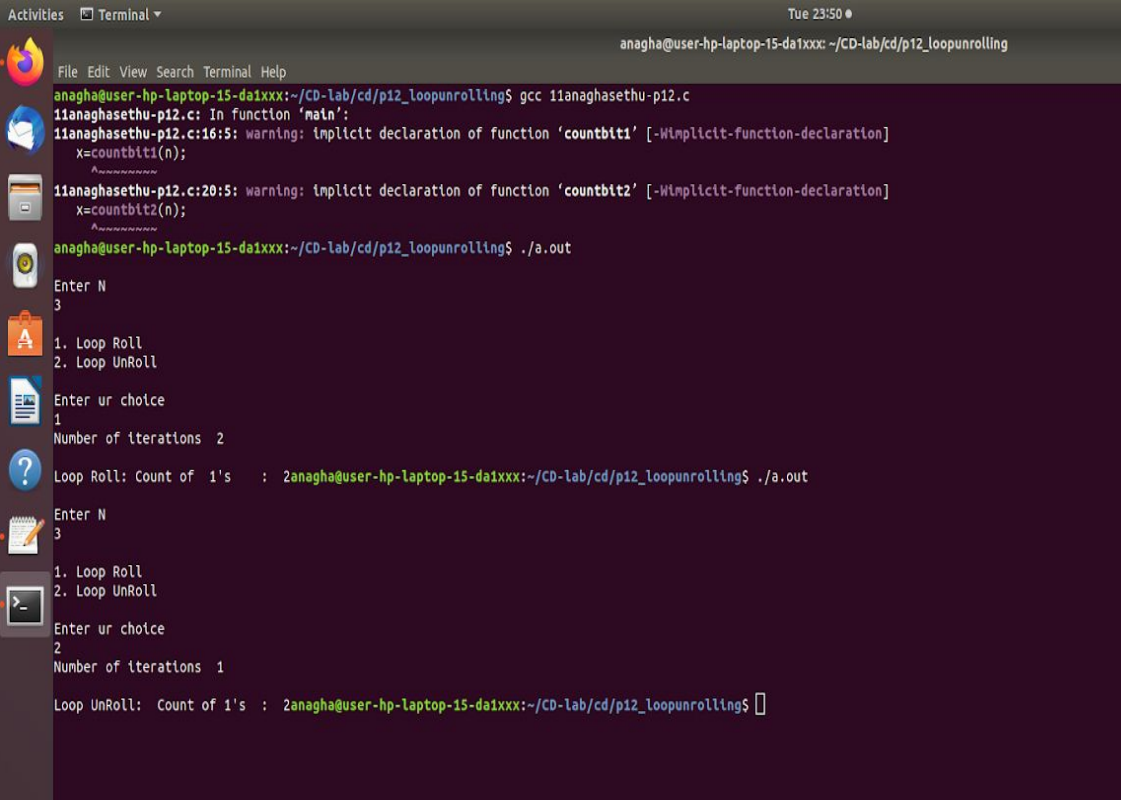
To write a program to perform loop unrolling.

ALGORITHM

1. Start
2. Initialize value N
3. Initialize the count value.
4. If perform loop unrolling then,
 01. Perform each operation upto count.
5. Else, loop rolling,
 01. Check the condition
 02. Perform the operation
 03. Increment the count
6. Print the result.
7. Stop

OUTPUT

```
gcc 11anaghasethu-p12.c
./a.out
```



```
anagha@user-hp-laptop-15-da1xxx:~/CD-lab/cd/p12_loopunrolling$ gcc 11anaghasethu-p12.c
11anaghasethu-p12.c: In function 'main':
11anaghasethu-p12.c:16:5: warning: implicit declaration of function 'countbit1' [-Wimplicit-function-declaration]
     x=countbit1(n);
     ^
11anaghasethu-p12.c:20:5: warning: implicit declaration of function 'countbit2' [-Wimplicit-function-declaration]
     x=countbit2(n);
     ^
anagha@user-hp-laptop-15-da1xxx:~/CD-lab/cd/p12_loopunrolling$ ./a.out
Enter N
3
1. Loop Roll
2. Loop UnRoll
Enter ur choice
1
Number of iterations 2
Loop Roll: Count of 1's : 2anagha@user-hp-laptop-15-da1xxx:~/CD-lab/cd/p12_loopunrolling$ ./a.out
Enter N
3
1. Loop Roll
2. Loop UnRoll
Enter ur choice
2
Number of iterations 1
Loop UnRoll: Count of 1's : 2anagha@user-hp-laptop-15-da1xxx:~/CD-lab/cd/p12_loopunrolling$
```

OUTPUT:

./a.out

Enter N

3

1. Loop Roll

2. Loop UnRoll

Enter ur choice

1

Number of iterations 2

Loop Roll: Count of 1's :

2anagha@user-hp-laptop-15-da1xxx:~/CD-lab/cd/p12_loopunrolling\$./a.out

Enter N

3

1. Loop Roll

2. Loop UnRoll

Enter ur choice

2

Number of iterations 1

Loop UnRoll: Count of 1's : 2