Name: Ainazik
Last Name: Kamaldinova

Answer 1)

main.c

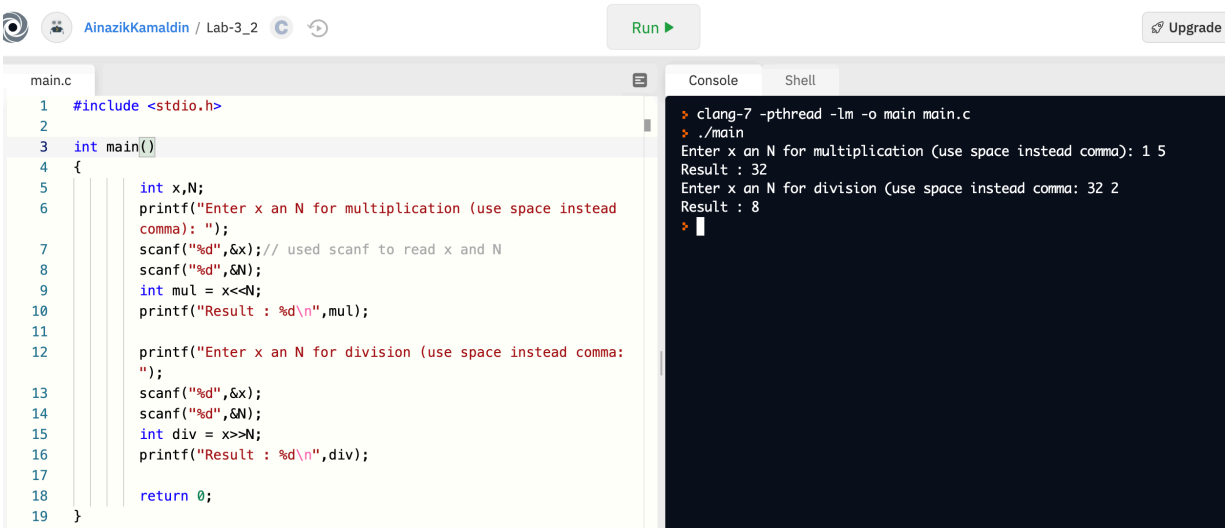
```c
{
    int x,N;
    printf("\nValue of x : ");
    scanf("%d",&x);
    printf("\nNow enter a value of N : ");
    scanf("%d",&N);

    x=x|(int)(pow(2,N));
    printf("\n( x OR 2^N ) = %d",x);

    x=x&(~(int)(pow(2,N)));
    printf("\n(x AND NOT(2^N)) = %d",x);


    printf("\n(x AND 2^N) = %d",x&(int)(pow(2,N)))
    ;

    return 0;
}
```

Outputs:

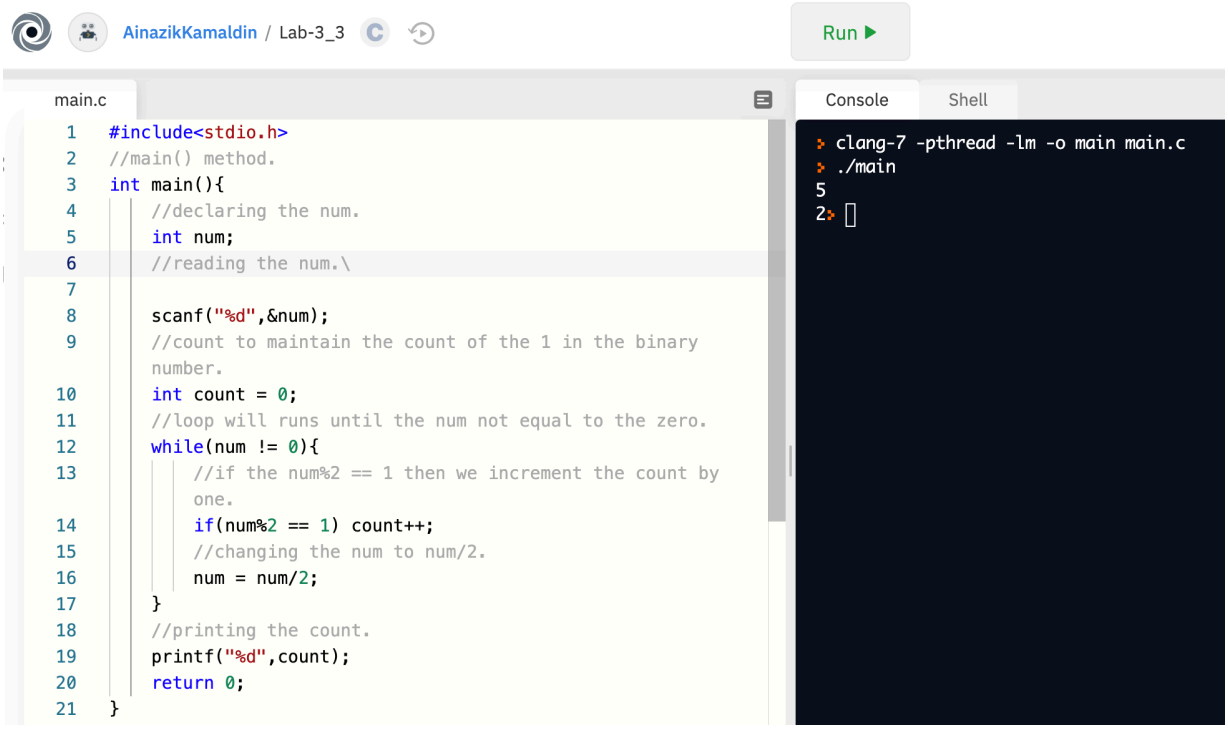
```
> clang-7 -pthread -lm -o main main.c
> ./main

Value of x : 4

Now enter a value of N : 2

( x OR 2^N ) = 4
(x AND NOT(2^N)) = 0
(x AND 2^N) = 0>
```

```
> clang-7 -pthread -lm -o main main.c
> ./main

Value of x : 5

Now enter a value of N : 6

( x OR 2^N ) = 69
(x AND NOT(2^N)) = 5
(x AND 2^N) = 0>
```

Answer 2)


AinazikKamaldin / Lab-3_2
Run
Upgrade
main.c
Console
Shell
#include <stdio.h>
int main()
{
int x,N;
printf("Enter x an N for multiplication (use space instead comma): ");
scanf("%d",&x);// used scanf to read x and N
scanf("%d",&N);
int mul = x<<N;
printf("Result : %d\n",mul);
printf("Enter x an N for division (use space instead comma: ");
scanf("%d",&x);
scanf("%d",&N);
int div = x>>N;
printf("Result : %d\n",div);
return 0;
}
clang-7 -pthread -lm -o main main.c
./main
Enter x an N for multiplication (use space instead comma): 1 5
Result : 32
Enter x an N for division (use space instead comma: 32 2
Result : 8

Answer 3)


AinazikKamaldin / Lab-3_3
Run
main.c
Console
Shell
#include<stdio.h>
//main() method.
int main(){
//declaring the num.
int num;
//reading the num.\
scanf("%d",&num);
//count to maintain the count of the 1 in the binary number.
int count = 0;
//loop will runs until the num not equal to the zero.
while(num != 0){
//if the num%2 == 1 then we increment the count by one.
if(num%2 == 1) count++;
//changing the num to num/2.
num = num/2;
}
//printing the count.
printf("%d",count);
return 0;
}
clang-7 -pthread -lm -o main main.c
./main
5
2