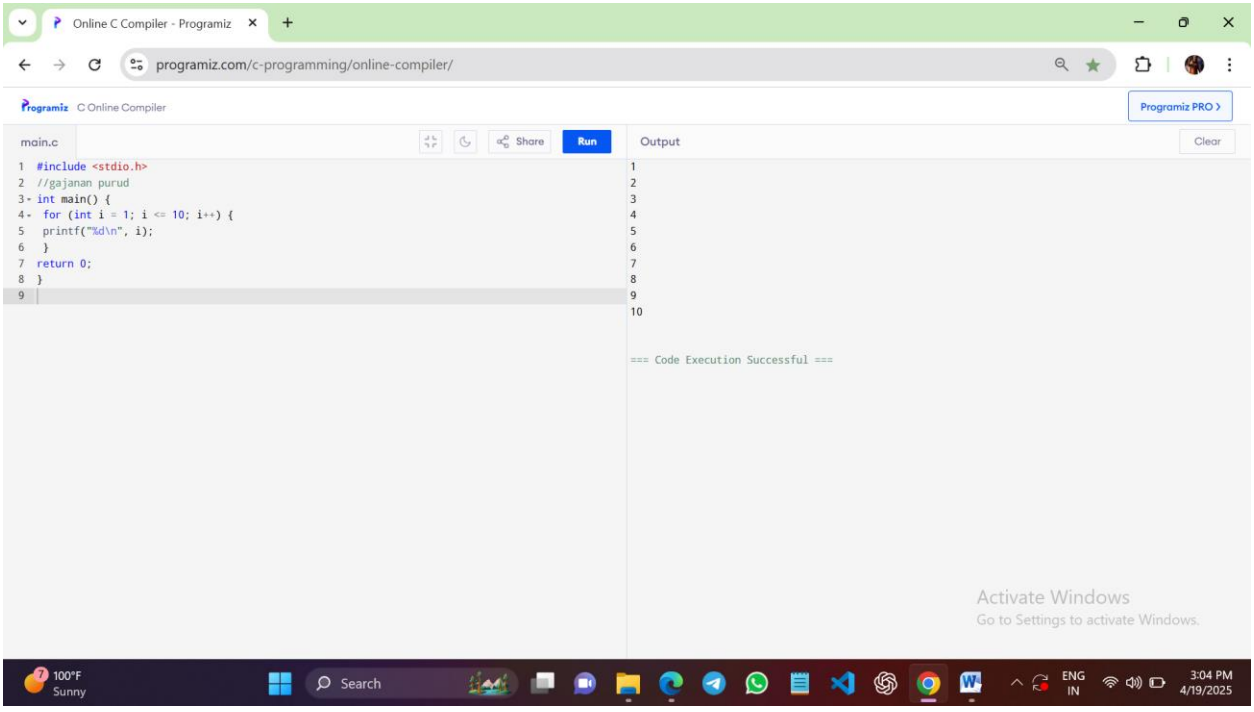
Name – Gajanan Purud

Assignment 3

1) **print no fro 1to 10 use for loop**

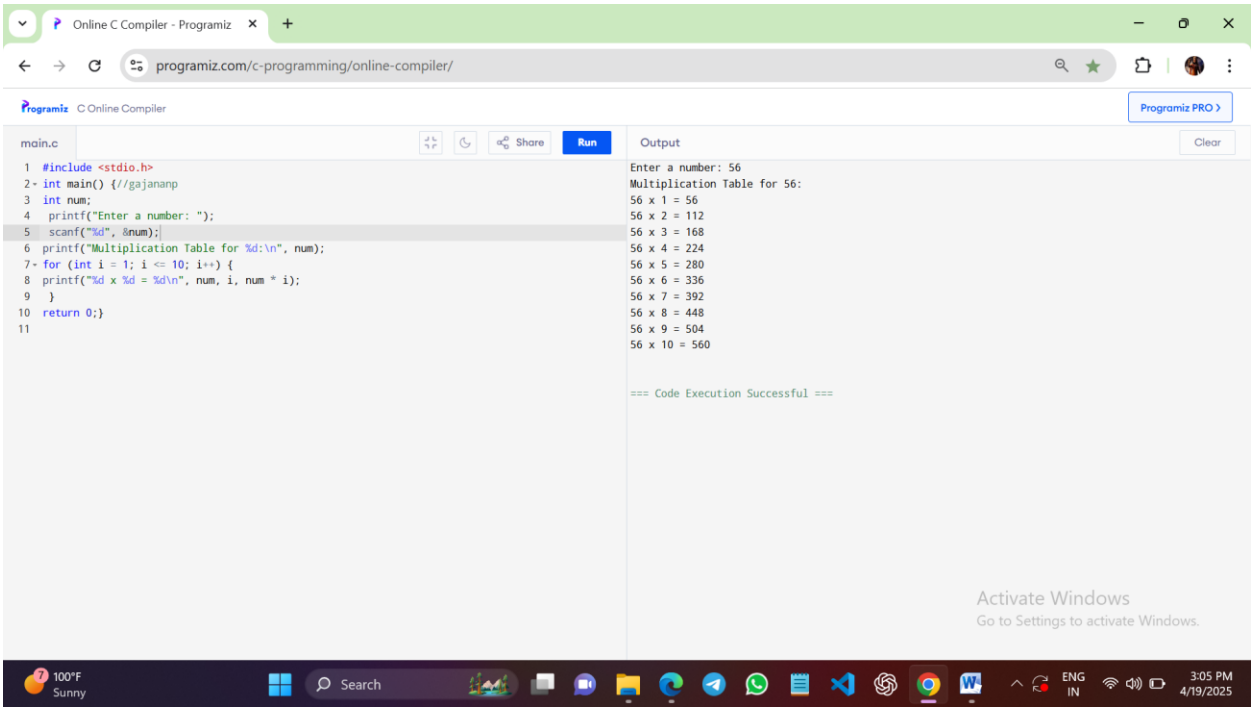
```
#include <stdio.h>

//gajanan purud

int main() {

 for (int i = 1; i <= 10; i++) {

 printf("%d\n", i);

 }

return 0;

}
```



2} Print table for the given number.

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

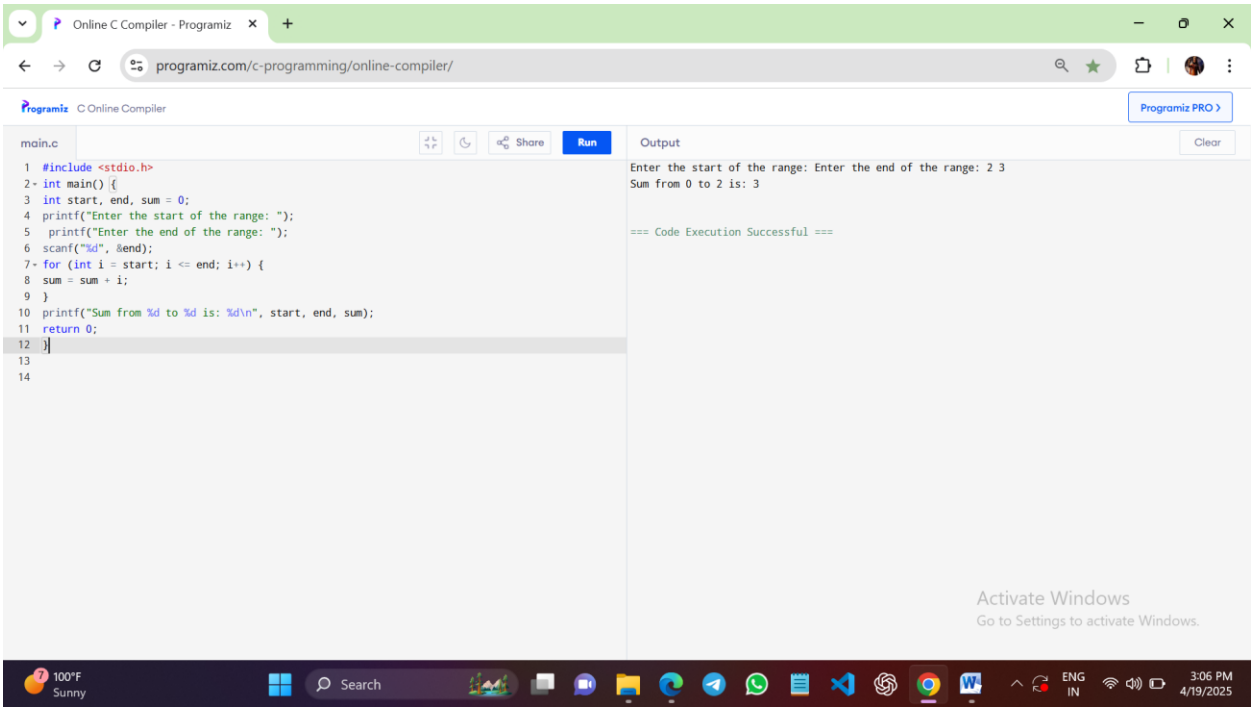
```
int main() {//gajananp

int num;

 printf("Enter a number: ");

 scanf("%d", &num);

printf("Multiplication Table for %d:\n", num);

for (int i = 1; i <= 10; i++) {

printf("%d x %d = %d\n", num, i, num * i);

 }

return 0;}
```



3) Calculate sum of numbers in the given range.

```
#include <stdio.h>

int main() {

int start, end, sum = 0;

printf("Enter the start of the range: ");
```

```
 printf("Enter the end of the range: ");
scanf("%d", &end);
for (int i = start; i <= end; i++) {
sum = sum + i;
}
printf("Sum from %d to %d is: %d\n", start, end, sum);
return 0;
}
```

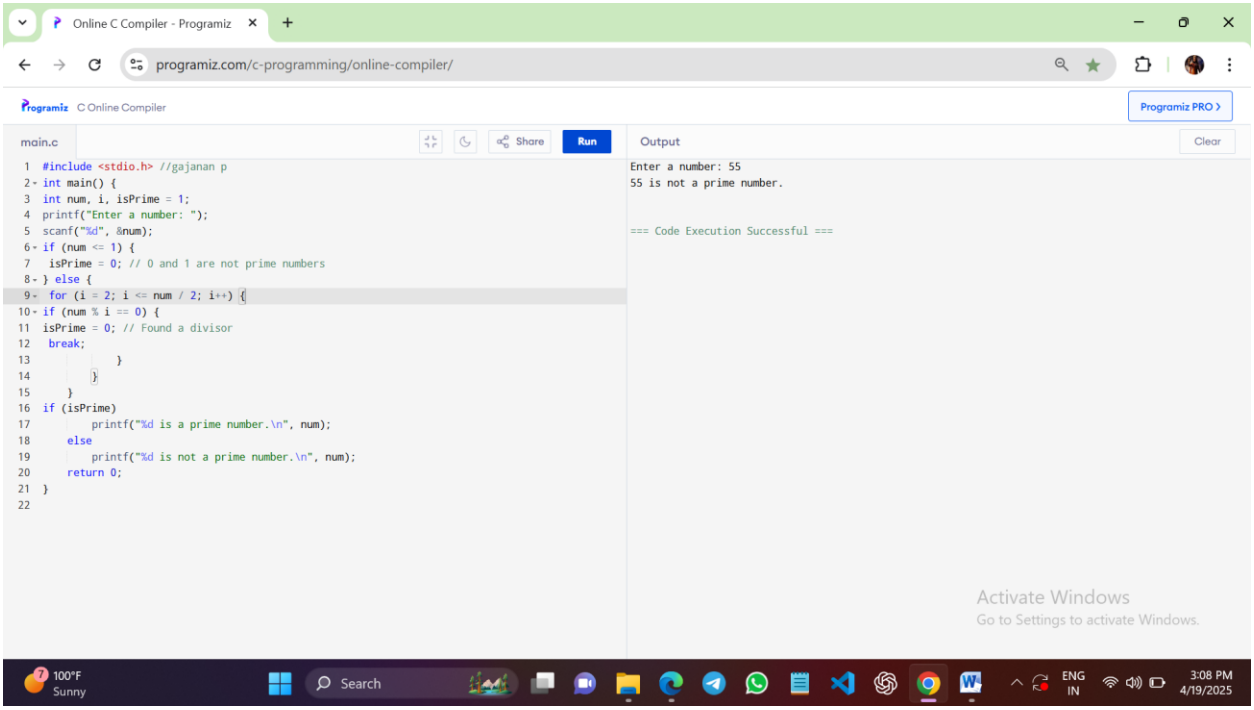


4) Check number is prime or not.

```
#include <stdio.h> //gajanan p
int main() {
int num, i, isPrime = 1;
printf("Enter a number: ");
scanf("%d", &num);
```

```
if (num <= 1) {
 isPrime = 0; // 0 and 1 are not prime numbers
} else {
 for (i = 2; i <= num / 2; i++) {
if (num % i == 0) {
isPrime = 0; // Found a divisor
 break;
          }
       }
   }
if (isPrime)
       printf("%d is a prime number.\n", num);
   else
       printf("%d is not a prime number.\n", num);
   return 0;
```

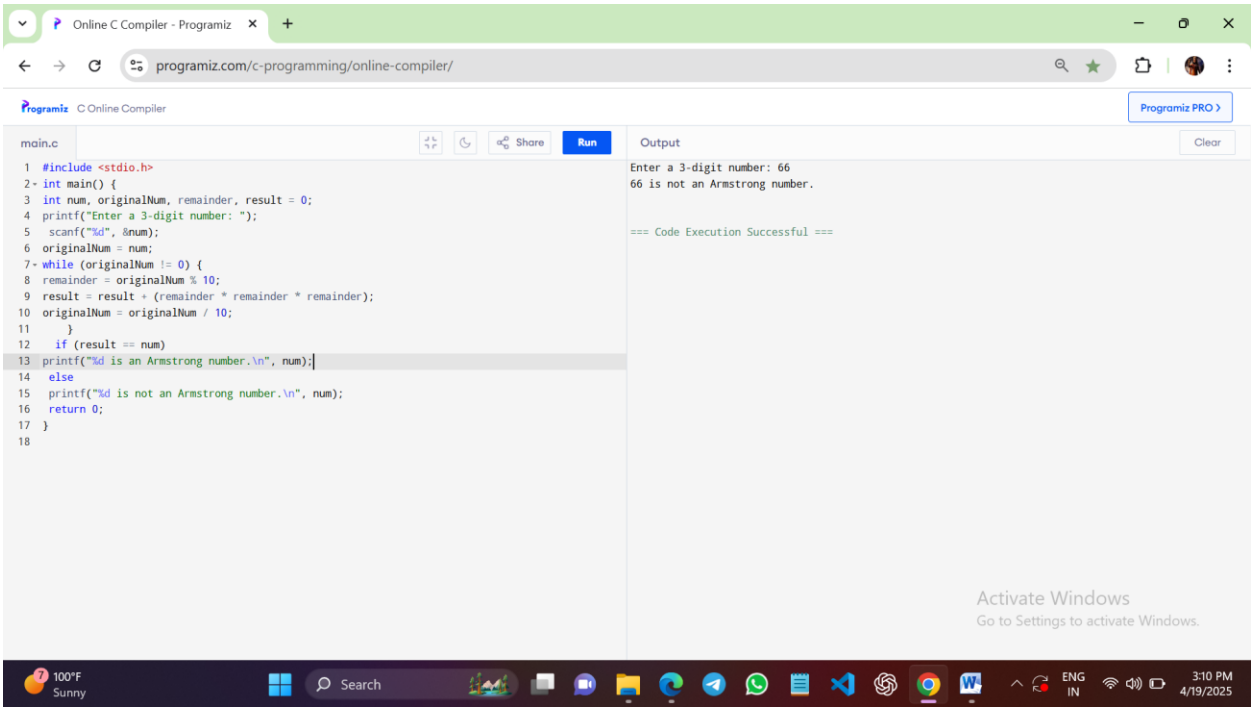
}



5) Check number is armstrong or not?

```
#include <stdio.h>

int main() {

int num, originalNum, remainder, result = 0;

printf("Enter a 3-digit number: ");

 scanf("%d", &num);

originalNum = num;

while (originalNum != 0) {

remainder = originalNum % 10;

result = result + (remainder * remainder * remainder);

originalNum = originalNum / 10;

   }
```

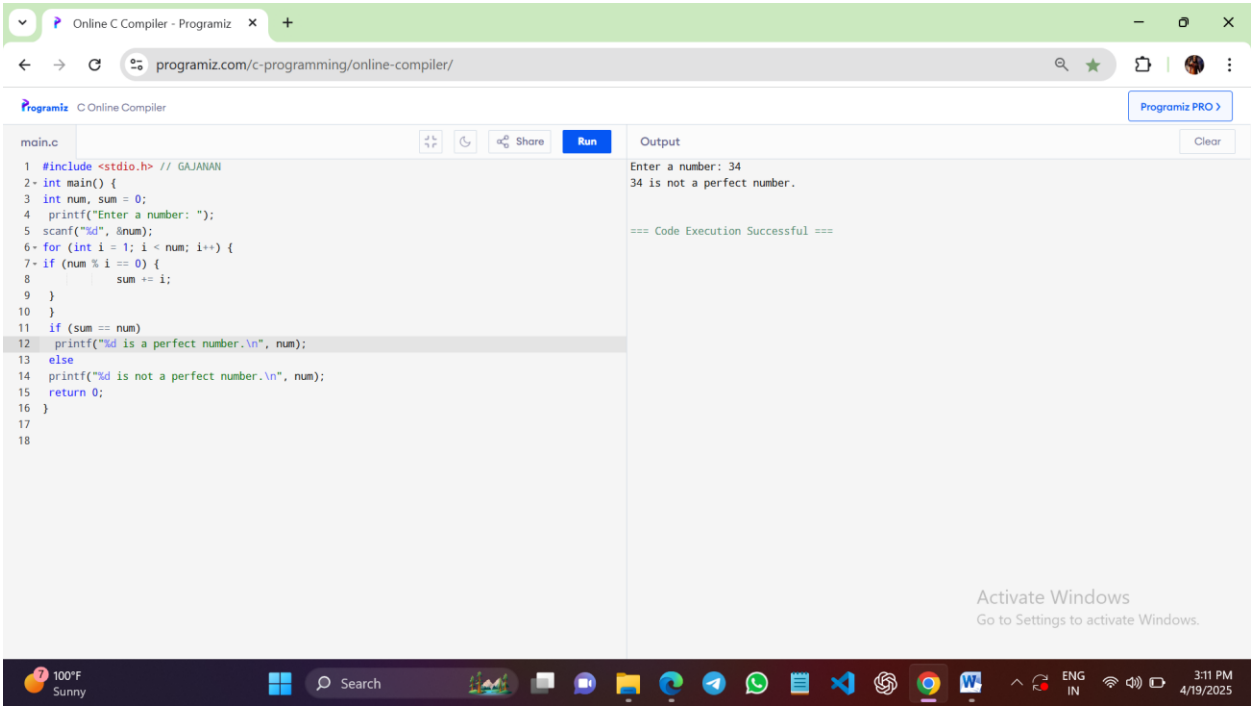
```
 if (result == num)
printf("%d is an Armstrong number.\n", num);
 else
 printf("%d is not an Armstrong number.\n", num);
 return 0;
}
```



6) Check number is perfect or not.

```
#include <stdio.h> // GAJANAN
int main() {
int num, sum = 0;
 printf("Enter a number: ");
scanf("%d", &num);
for (int i = 1; i < num; i++) {
if (num % i == 0) {
        sum += i;
```

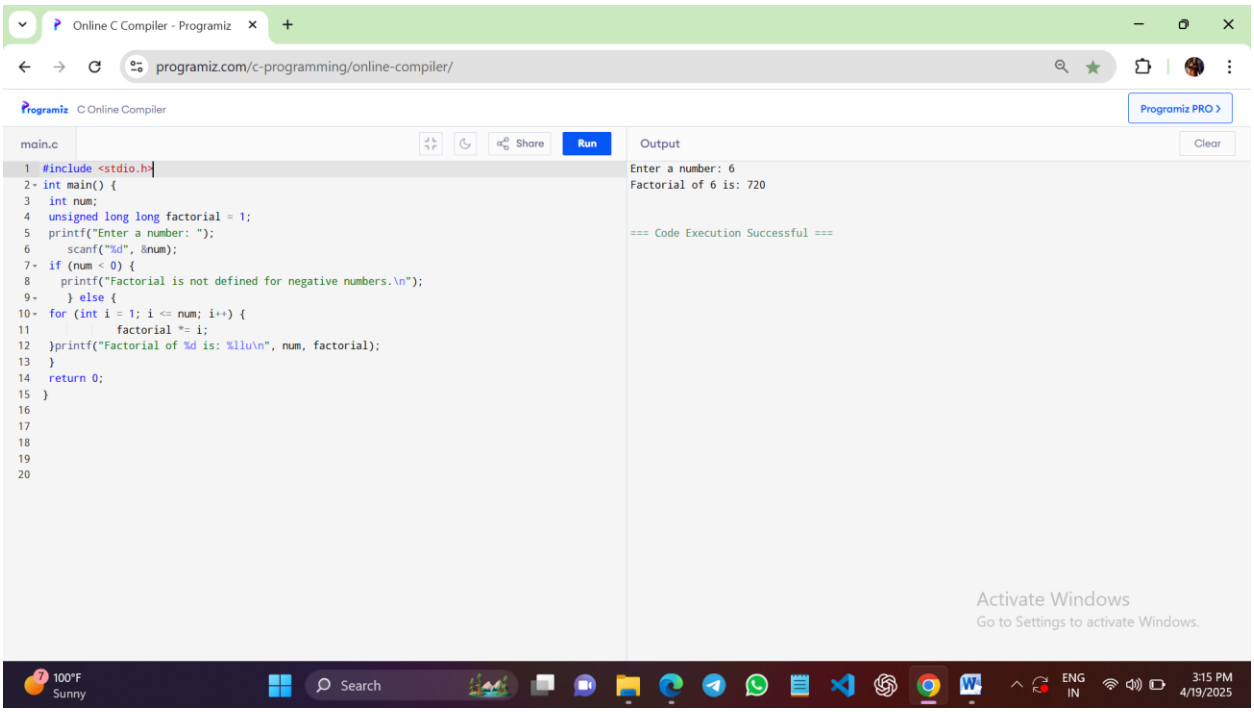
```
}
}
if (sum == num)
 printf("%d is a perfect number.\n", num);
else
printf("%d is not a perfect number.\n", num);
return 0;
}
```



7) Find factorial of number

```
#include <stdio.h>
int main() {
 int num;
 unsigned long long factorial = 1;
 printf("Enter a number: ");
   scanf("%d", &num);
```

```
if (num < 0) {
  printf("Factorial is not defined for negative numbers.\n");
   } else {
for (int i = 1; i <= num; i++) {
        factorial *= i;
}printf("Factorial of %d is: %llu\n", num, factorial);
}
return 0;
}
```



8) Check number is strong or not.

```
#include <stdio.h>
int main() {
int num, originalNum, digit, i, fact, sum = 0;
printf("Enter a number: ");
scanf("%d", &num);
```

```
originalNum = num;
while (num > 0) {
 digit = num % 10;
fact = 1;
  for (i = 1; i <= digit; i++) {
          fact *= i;
       }
sum += fact;
num /= 10;
 }
if (sum == originalNum)
printf("%d is a Strong number.\n", originalNum);
 else
printf("%d is not a Strong number.\n", originalNum);
return 0;
}
```

9) Check the given number is palindrome or not?use loop

```
#include <stdio.h>
int main() {
 int num, originalNum, reversed = 0, digit;
   printf("Enter a number: ");
  scanf("%d", &num);
   originalNum = num;
    for (; num != 0; num /= 10) {
```

```
        digit = num % 10;
        reversed = reversed * 10 + digit;
    }
if (reversed == originalNum)
printf("%d is a Palindrome number.\n", originalNum);
    else
  printf("%d is not a Palindrome number.\n", originalNum);
return 0;
}
```

10) Add the (first and last) digit of a given number?

```
//gajanan
#include <stdio.h>
int main() {
int num, originalNum, lastDigit, firstDigit;
printf("Enter a number: ");
scanf("%d", &num);
originalNum = num;
  lastDigit = num % 10;
while (num >= 10) {
num = num / 10;
 } firstDigit = num;
 int sum = firstDigit + lastDigit;
 printf("First digit: %d\n", firstDigit);
```

```
 printf("Last digit: %d\n", lastDigit);

printf("Sum of first and last digit of %d is: %d\n", originalNum, sum);

return 0;

}
```