Bangladesh University of Business & Technology (BUBT)

Lab Report

Course Title : Structured Programming Language

Course Code : CSE 101

Experiment No : 01

Experiment Name : C language

Submitted by

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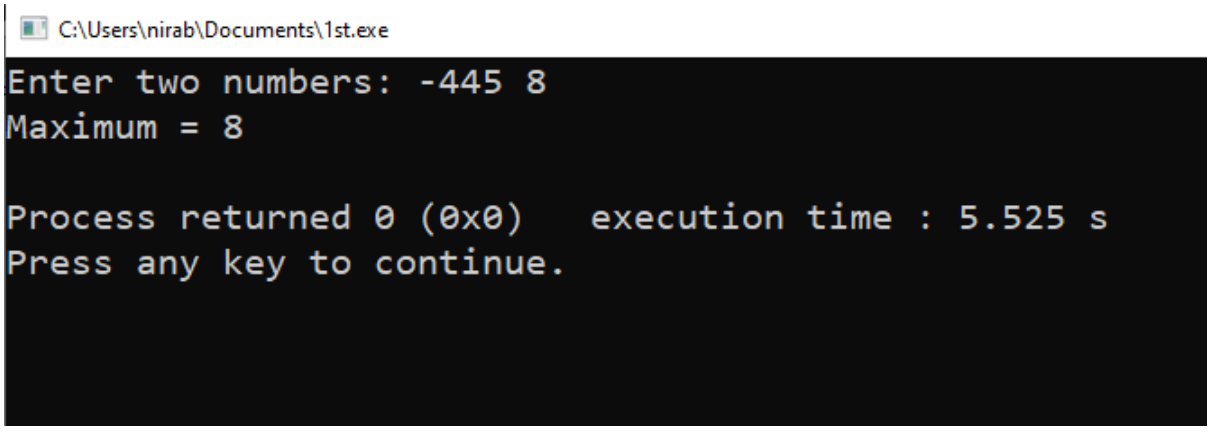
Intake :56

Section :9

Question 1: C program to find the maximum between two numbers.

```
#include <stdio.h>
 int main() {
   int num1, num2;
  printf("Enter two numbers: ");
   scanf("%d %d", &num1, &num2);
  if (num1 > num2)
      printf("Maximum = %d\n", num1);
   else if (num2 > num1)
      printf("Maximum = %d\n", num2);
   else
      printf("Both numbers are equal.\n");
  return 0;
}
```

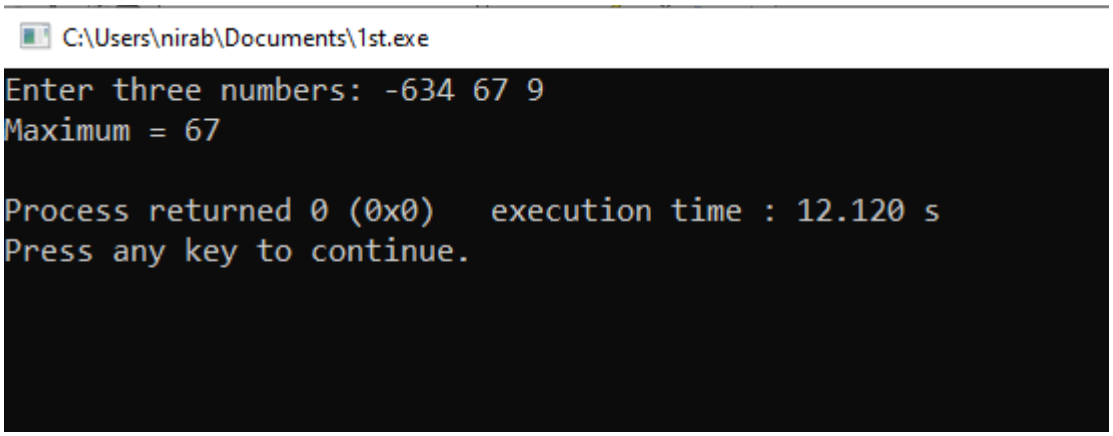
Output:



Question 2: C program to find maximum between three numbers.

```
#include <stdio.h>
 int main() {
 int num1, num2, num3;
 printf("Enter three numbers: ");
 scanf("%d %d %d", &num1, &num2, &num3);
   if (num1 >= num2 && num1 >= num3)
      printf("Maximum = %d\n", num1);
   else if (num2 >= num1 && num2 >= num3)
      printf("Maximum = %d\n", num2);
   else
      printf("Maximum = %d\n", num3);


   return 0;
}
```

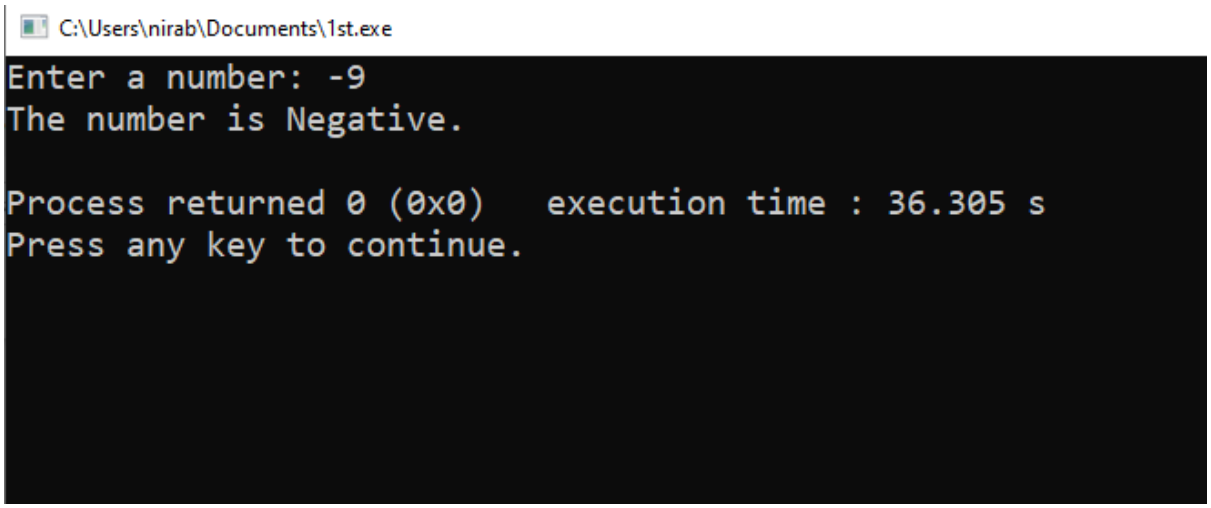
Output:



Question 3 : C program to check whether a number is positive, negative or zero.

```
#include <stdio.h>
 int main() {
  int num;
  printf("Enter a number: ");
   scanf("%d", &num);
   if (num > 0)
      printf("The number is Positive.\n");
   else if (num < 0)
      printf("The number is Negative.\n");
   else
      printf("The number is Zero.\n");
 return 0;}
```

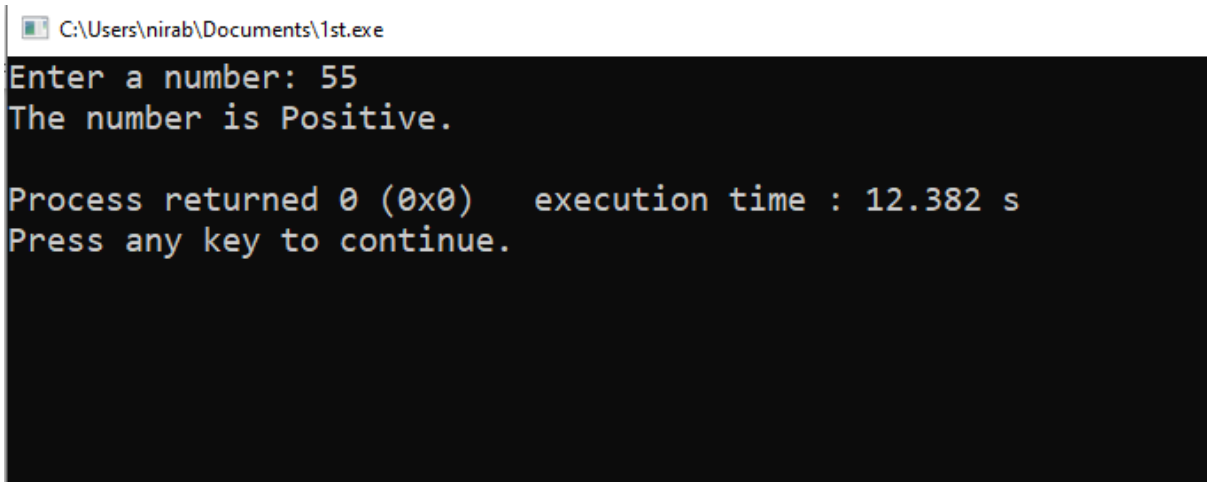
Output:



Question 4: C program to check whether a number is divisible by 5 and 11 or not.

```
#include <stdio.h>


int main() {
   int num;
    printf("Enter a number: ");
   scanf("%d", &num);
  if (num % 5 == 0 && num % 11 == 0)
      printf("The number is divisible by both 5 and 11.\n");
   else
    printf("The number is not divisible by both 5 and 11.\n")
   return 0;
}
```

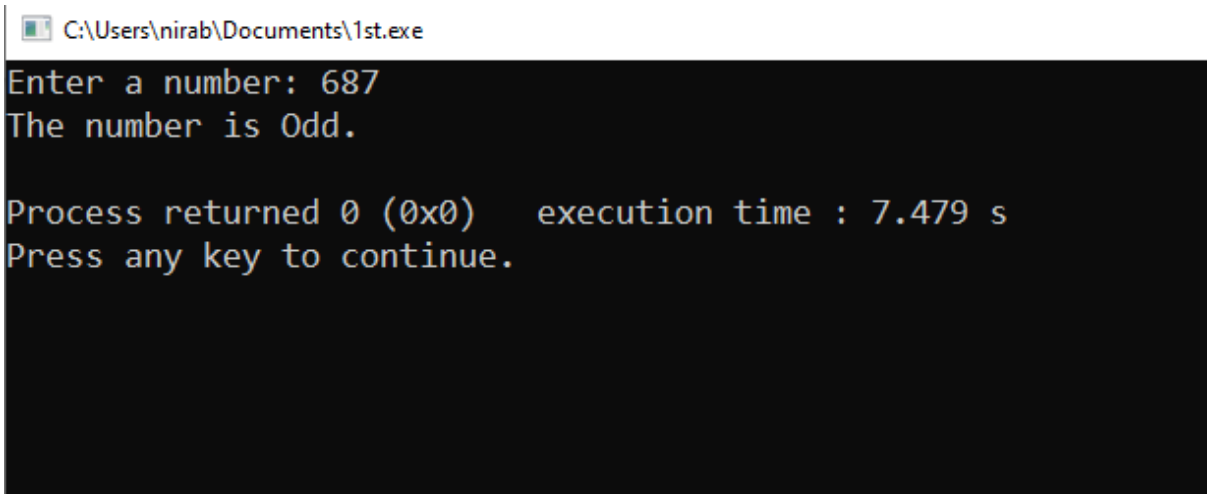
Output:



Question 5: C program check whether a number is even or odd.

```
#include <stdio.h>
 int main() {
   int num;
    printf("Enter a number: ");
   scanf("%d", &num);
   if (num % 2 == 0)
      printf("The number is Even.\n");
   else
      printf("The number is Odd.\n");
    return 0;
}
```

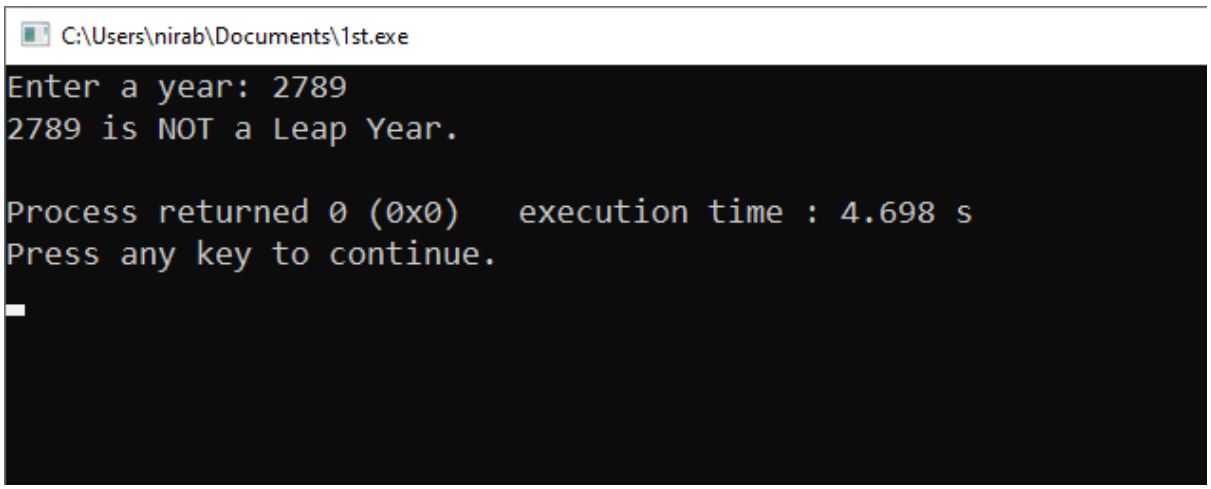
Output:



Question 6: C program to check Leap Year.

```
#include <stdio.h>
 int main() {
   int year;
  printf("Enter a year: ");
   scanf("%d", &year);
    if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0))
      printf("%d is a Leap Year.\n", year);
   else
      printf("%d is NOT a Leap Year.\n", year);
    return 0;
}
```

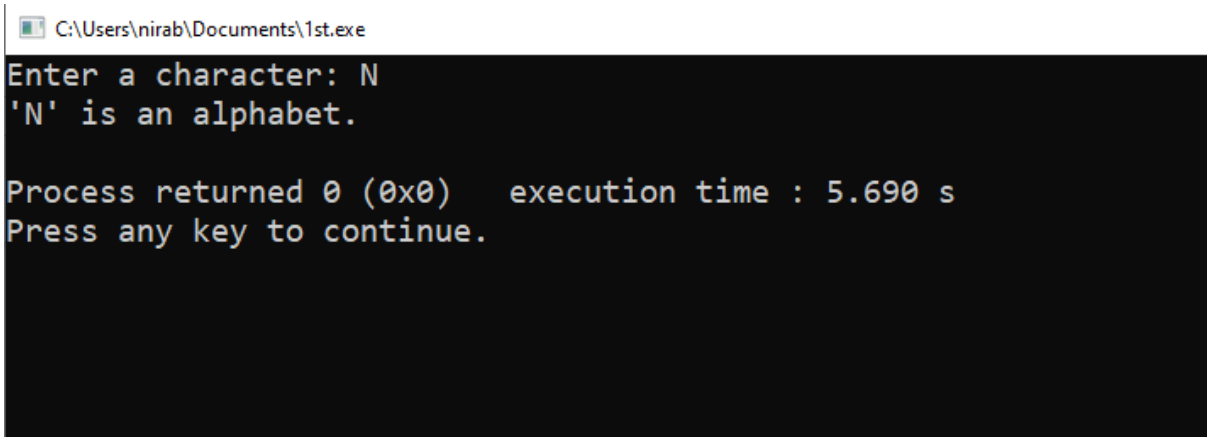
Output:



Question 7: C program to check whether a character is alphabet or not.

```
#include <stdio.h>
 int main() {
   char ch;
   printf("Enter a character: ");
   scanf("%c", &ch);
    if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z'))
      printf("'%c' is an alphabet.\n", ch);
   else
      printf("'%c' is NOT an alphabet.\n", ch);
    return 0;
}
```

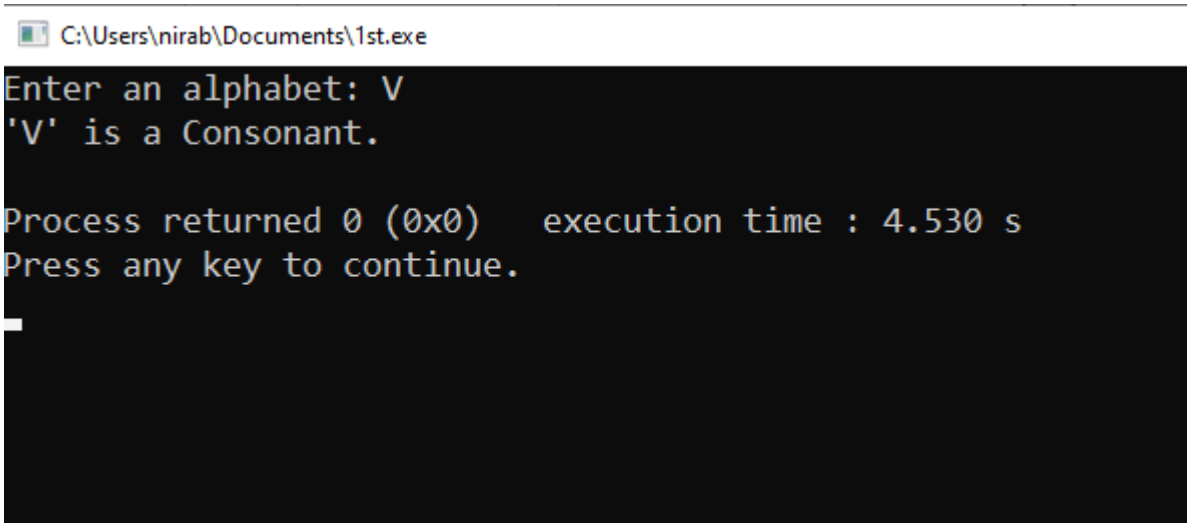
Output:



Question 8: C program to check vowel or consonant .

```
#include <stdio.h>

int main() {
   char ch;

   printf("Enter an alphabet: ");
   scanf("%c", &ch);

   // Check if it's an alphabet first
   if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z')) {
      // Check for vowels
      if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u' ||
         ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U')
         printf("'%c' is a Vowel.\n", ch);
      else
         printf("'%c' is a Consonant.\n", ch);
   } else {
      printf("'%c' is NOT an alphabet.\n", ch);
   }

   return 0;
}
```

Output:

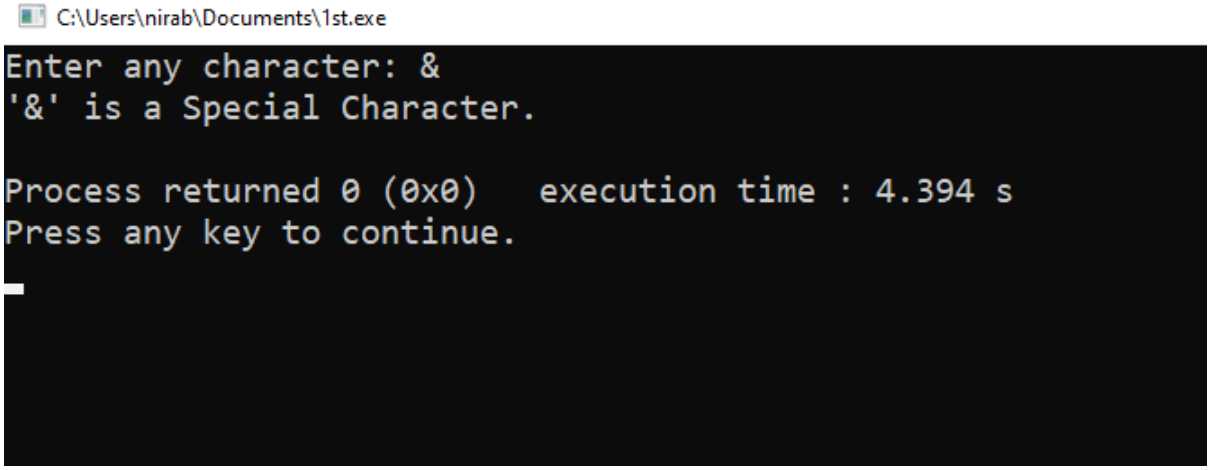


Question 9 : C program to check whether a character is alphabet, digit or special character.

```
#include <stdio.h>

int main() {
   char ch;

   printf("Enter any character: ");
   scanf("%c", &ch);
   if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z'))
      printf("'%c' is an Alphabet.\n", ch);
   else if (ch >= '0' && ch <= '9')
```

```
    printf("'%c' is a Digit.\n", ch);
  else
     printf("'%c' is a Special Character.\n", ch);

  return 0;
}
```

Output:



Question 10: C program to check whether a character is Uppercase or Lowercase.

```
#include <stdio.h>

int main() {
  char ch;

  printf("Enter any character: ");
  scanf("%c", &ch);
```

```
    if (ch >= 'A' && ch <= 'Z')
        printf("'%c' is an Uppercase letter.\n", ch);
    else if (ch >= 'a' && ch <= 'z')
        printf("'%c' is a Lowercase letter.\n", ch);
    else
        printf("'%c' is not an alphabet.\n", ch);

    return 0;
}
```

Output: