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EXPERIMENT NUMBER – 1.1

STUDENT'S NAME –	Govind Kumar
STUDENT'S UID –	20BET1086
CLASS AND GROUP –	BE IT
SEMESTER –	1ST

TOPIC OF EXPERIMENT – Write a program to input details of undergraduate student.

AIM OF THE EXPERIMENT - The course aim to provide exposure to problem solving with programming.

FLOWCHART/ ALGORITHM

Program code:

```
#include <stdio.h>
void main()
{
char n[200];
int a;
long long int cn;
float per;
printf("Enter The Name:\n",n);
gets(n);
printf("Enter your age:\n");
scanf("%d",&a);
printf("Enter your contact number:\n");
scanf("%lld",&cn);
printf("Enter your matric class percentage:
\n");
scanf("%f",&per);

printf("\nYour name is %s\n",n);
printf("\nYour age is %d\n",a);
printf("\nYour contact number is %lld\n",cn);
printf("\nYour matric percentage is
%f\n",per);
printf("\nThankYou for providing your
information\n");

}
```

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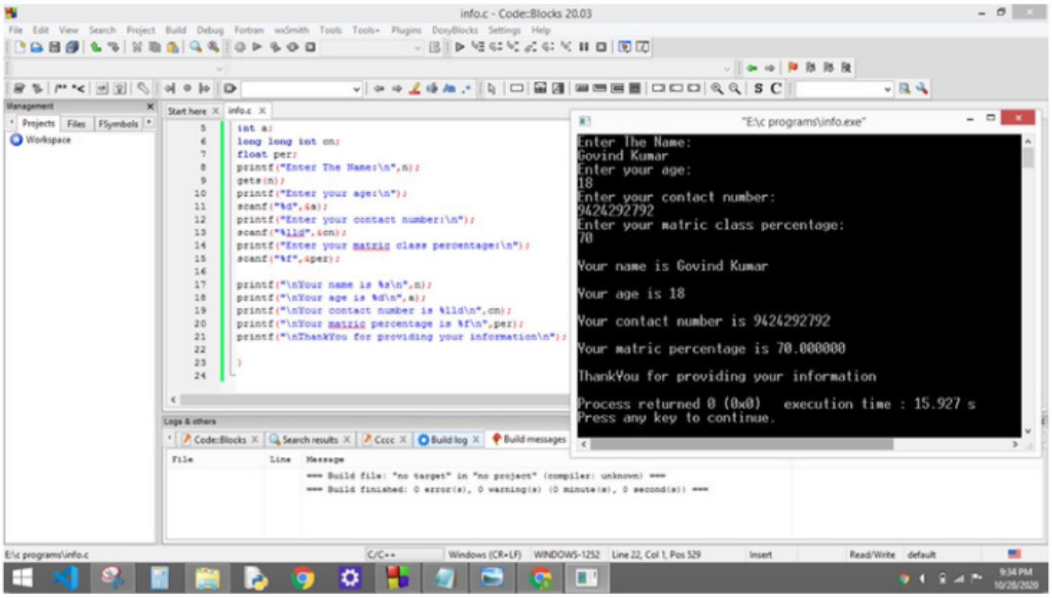
After defining variables with respective data type and using scanf & printf for input we will get our result.

OUTPUT



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LEARNING OUTCOMES

- Identify situations where computational methods would be useful.
- Approach the programming tasks using techniques learnt and write pseudo-code.
- Choose the right data representation formats based on the requirements of the problem.
- Use the comparisons and limitations of the various programming constructs and choose the right one for the task.

EVALUATION COLUMN (To be filled by concerned faculty only)

Sr. No.	Parameters	Maximum Marks	Marks Obtained
1.	Student's performance while executing the program in Computer Lab	12	
2.	Completion of worksheet with learning outcomes and program's output along with cleanliness and discipline.	10	
3.	Clarification of theoretical concepts	8	
4.	Total Marks	30	
5.	Teacher's Signature (with date)		

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EXPERIMENT NUMBER – 1.2

STUDENT'S NAME –	**Govind Kumar**
STUDENT'S UID –	**20BET1086**
CLASS AND GROUP –	**BE IT**
SEMESTER –	**1ST**

TOPIC OF EXPERIMENT –

A cube having a side of 6cm is painted red on all the faces and then cut into smaller cubes of 1cm each. Write program to find the total number of smaller cubes so obtained.

AIM OF THE EXPERIMENT –

The course aim to raise the programming skills of students via logic building capability

FLOWCHART/ ALGORITHM

PROGRAM CODE

```
#include <stdio.h>
void main()
{

  int a,b,s;
  printf("Size of one side of bigger cube(in
cm): ");
  scanf("%d",&a);
  printf("size of one side of smaller cube
after cutting (in cm): ");
  scanf("%d",&b);
  s=(a/b)*(a/b)*(a/b);
  printf("Number of smaller cubes
produce : %d\n",s);
}
```

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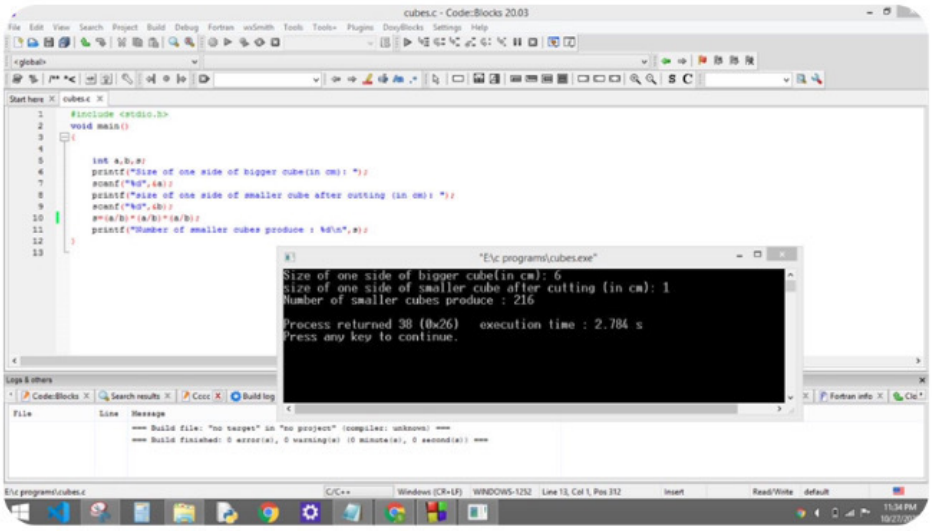
OUTPUT



LEARNING OUTCOMES

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EVALUATION COLUMN (To be filled by concerned faculty only)

Sr. No.	Parameters	Maximum Marks	Marks Obtained
1.	Student's performance while executing the program in Computer Lab	12	
2.	Completion of worksheet with learning outcomes and program's output along with cleanliness and discipline.	10	
3.	Clarification of theoretical concepts	8	
4.	Total Marks	30	
5.	Teacher's Signature (with date)		

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EXPERIMENT NUMBER – 1.3

STUDENT'S NAME –	Govind kumar
STUDENT'S UID –	20BET1086
CLASS AND GROUP –	BE IT
SEMESTER –	1ST

TOPIC OF EXPERIMENT –

A train can travel 50% faster than a car .Both start from point A at the same time and reach point B, 75 kilometers away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. Write c program to compute the speed of car.

AIM OF THE EXPERIMENT –

With knowledge of C language students would be able to model real world problems

programcode:

```
#include <stdio.h>
int main()
{
  int s,d,t;
  printf("Enter distance
in kms \n");
  scanf("%d",&d);
  printf("Enter time \n");
  scanf("%d",&t);
  s=20*(d/t);
  printf("speed of car:
%d\n",s);
}
```

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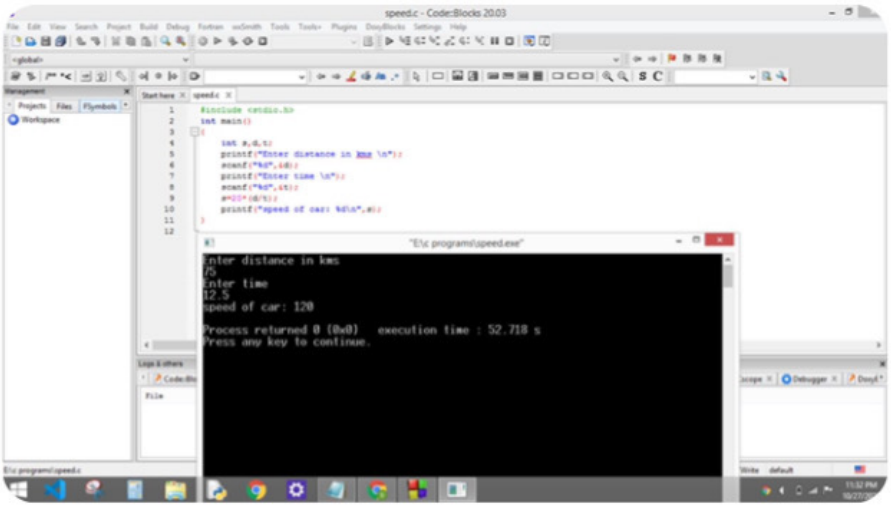
ERRORS ENCOUNTERED DURING PROGRAM'S EXECUTION

no error

Output:



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LEARNING OUTCOMES

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EVALUATION COLUMN (To be filled by concerned faculty only)

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5.	Teacher's Signature (with date)		

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EXPERIMENT NUMBER – 1.4

STUDENT'S NAME –	**Govind kumar**
STUDENT'S UID –	**20BET1086**
CLASS AND GROUP –	**BE IT**
SEMESTER –	**1ST**

TOPIC OF EXPERIMENT –

Sonu ranked mth from the top and nth from the bottom in a class.How many students are there in the class.

AIM OF THE EXPERIMENT –

The course aim to raise the programming skills of students via logic building capability

FLOWCHART/ ALGORITHM

Program code:

```
#include <stdio.h>
 int main()
 { int m,n,T_students;
   printf ("Sonu's position from top  ");
   scanf("%d",&m);
   printf ("Sonu's position from bottom  ");
   scanf("%d",&n);
   T_students=m+n-1;
   printf ("Total students in class are : ");
   printf("%d\n",T_students);
 }
```

ERRORS ENCOUNTERED DURING PROGRAM'S EXECUTION

No

PROGRAMS' EXPLANATION (in brief)

In this program first we define variable m,n and T_students as Sonu's position from top ,bottom and total no. of students.

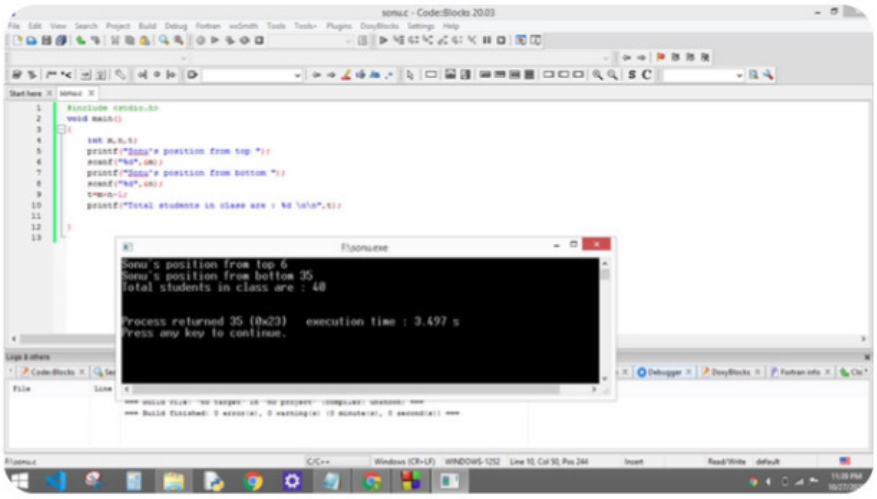
%d formate specifier use because we are using integer value with no decimal require.

Using formula m+n-1 we will get total no. of students.

Let sonu get 6^{th} position from top and 35^{th} from bottom then

Total no. of students in class are 6+35-1 that is 40

Output:



LEARNING OUTCOMES

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EVALUATION COLUMN (To be filled by concerned faculty only)

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5.	Teacher's Signature (with date)		

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EXPERIMENT NUMBER – 1.5

STUDENT'S NAME –	Govind kumar
STUDENT'S UID –	20BET1086
CLASS AND GROUP –	BE IT
SEMESTER –	1ST

TOPIC OF EXPERIMENT –

A can do piece of work in 8 days.B can do the same work in 14 days.Write a program to calculate and print the number of days to be taken to complete the work if they work together

AIM OF THE EXPERIMENT –

The course aim to raise the programming skills of students via logic building capability

FLOWCHART/ ALGORITHM

Program code:

```
#include <stdio.h>
void main()
{
  int a,b,t;
  printf("Enter time taken (no. of days) by
first person to complete the task: ");
  scanf("%d",&a);
  printf("Enter time taken (no. of days) by
second person to complete the task: ");
  scanf("%d",&b);
  t=(a*b)/(a+b);
  printf("Total number of days taken if a
and b work together are : %d\n\n",t);
}
```

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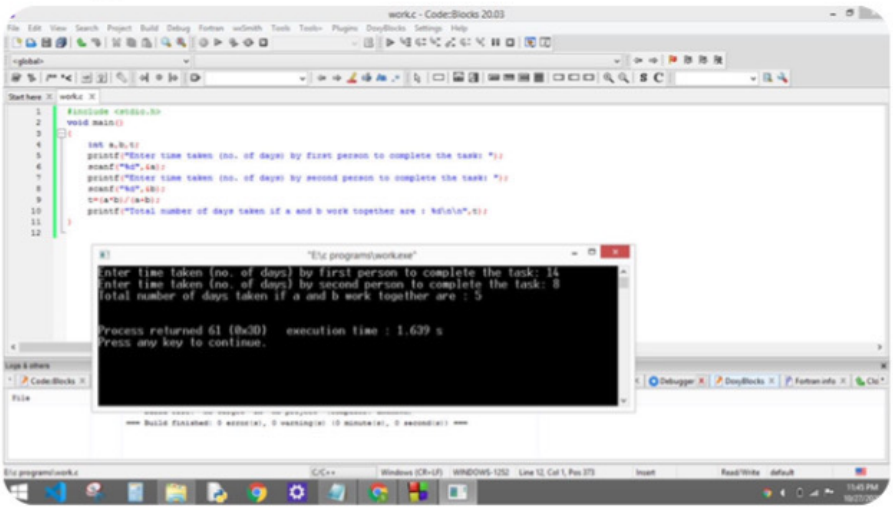
ERRORS ENCOUNTERED DURING PROGRAM'S EXECUTION

no error

Output:



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LEARNING OUTCOMES

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EVALUATION COLUMN (To be filled by concerned faculty only)

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