Experiment no – 05(a) Aim:

Write a program to print area of square using function.

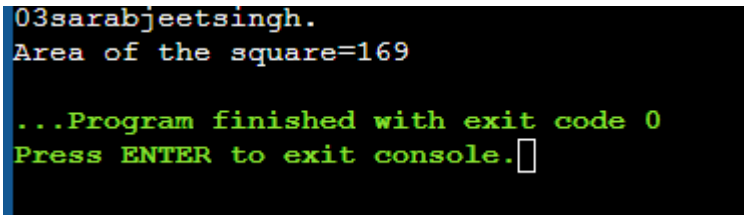
Algorithm:

i. Start.
ii. Declare at s as integer. iii. Initialize value of s. iv. Calculate at s×s.
v. print area of triangle . vi. End.

Code:

```
#include
<stdio.h> int
main()
{
printf("03sarabjeetsingh.\n");
int s=13; int
area_square=s*s;
printf("Area of the square=%d",area_square);
}
```

Output:



Experiment no – 05(b) Aim:

Write a program using recursive function.

Algorithm:

i. Start.
ii. Read the Input. **iii.** Perform recursion. **iv.** Print result. **v.** Stop.

Code:

```
#include <stdio.h> int
sum(int n);

int main() { printf("03-Sarabjeetsingh.\n");
int number, result;

   printf("Enter a positive integer: ");
scanf("%d", &number);     result =
sum(number);     printf("sum = %d",
result);     return 0; } int sum(int n) {
if (n != 0)
      // sum() function calls itself
return n + sum(n-1);      else
return n;
}
```

Output:

```
03-Sarabjeetsingh.
Enter a positive integer: 3
sum = 6

...Program finished with exit code 0
Press ENTER to exit console.
```

Experiment no – 05(c) Aim:

Write a program to square root, abs() value using function.

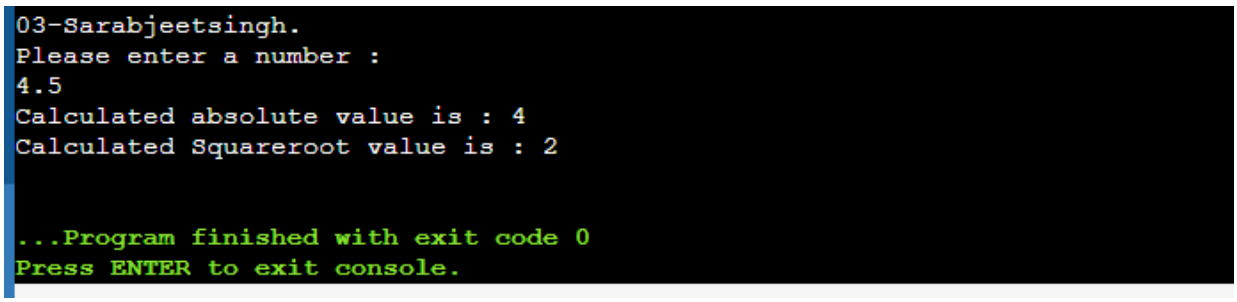
Algorithm:

i. Start
ii. Read the input
iii. Calculate absolute value
iv. Calculate square root value
v. Print results

vi. Stop **Code:**

```
#include<stdio.h>
#include<math.h> int
main()
{ printf("03-Sarabjeetsingh.\n");
int num, a;
 printf("Please enter a number :\n");
scanf("%d",&num);   a = abs(num);
 printf("Calculated absolute value is : %d\n", a);   a =
sqrt(num);
 printf("Calculated Squareroot value is : %d\n",a);
return 0;
}
```

Output:



Experiment no – 05(d) Aim:

Write a program using go to statement.

Algorithm:

i. Start
ii. Read the Input
iii. Check if the input is inside loop or outside loop
iv. Print result v. Stop **Code:** *#include<stdio.h> int main()*

```
{ printf("03-sarabjeesingh.\n");
   int n;
   for(;;)      /*ifinite loop*/
   {
  printf("enter any number :");
scanf("%d",&n);   if(n == 5)
goto ap;        /* use of goto statement*/ if
(n% 2 == 0)
  continue;   /*use of continue statement*/
if (n% 3 == 0) break;   /*use of break
state*/  printf("Inside loop");
} ap: printf("Outside
loop"); return 0;
}
```

Output: