Experiment: 1

Aim: Create a user define function named ASCII which accept one argument (of character type) and display ASCII value of that character

Software: Dev C++

Code:

```c
#include<stdio.h>

void ASSCI (char a)
{
    printf("The ASSCI Value of %c Is %d",a,a);
}

int main()
{
    char a;

    printf("Enter A Character:-");
    scanf("%c",&a);

    ASSCI(a);

    return 0;

}
```

Student Name:- Aryan Dilipbhai Langhanoja
Roll_No_:- 92200133030

Output:

```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programming Assig
Enter A Character:-A
The ASSCI Value of A Is 65
-------------------------------
Process exited after 2.208 seconds with return value 0
Press any key to continue . . .
```

Experiment: 2

Aim: Write a program that take input names of 10 students. Arrange them in ascending order in string array.

Software: Dev C++

Code:

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

int main()
{
   char names[10][30],temp[30];

   printf("Enter 10 names:\n");

   for(int i=0; i<10;i++)
   {
      scanf("%s",&names[i]);
   }

   for(int i=0;i<10;i++)
   {

      for(int j=i+1;j<10;j++)
      {
         if(strcmp(names[i],names[j])>0)
         {
```

```
        strcpy(temp,names[i]);
        strcpy(names[i],names[j]);
        strcpy(names[j],temp);
      }
   }
}
printf("Names in ascending order are:");

for(int i=0;i<10;i++)
{
    printf("\n%s",names[i]);
}

return 0;

}
```

Output:

```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programming Assigment-4\Programm-2.exe
Enter 10 names:
A
B
C
D
E
F
G
H
I
J
Names in ascending order are:
A
B
C
D
E
F
G
H
I
J
--------------------------------
Process exited after 9.361 seconds with return value 0
Press any key to continue . . .
```

Student Name:- Aryan Dilipbhai Langhanoja
Roll_No_:- 92200133030

Experiment: 3

Aim: Write a function that receives five integers and returns the average of these numbers. Call this function from main() and print the results in main()

Software: Dev C++

Code:-

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

double avgn (int a1,int a2,int a3,int a4,int a5)
{
	double avg;
	avg= (a1+a2+a3+a4+a5)/5;
	return avg;
}

int main()
{
	int a[5];
	float avg;

	for(int i=0;i<5;i++)
	{
		printf("Enter The Element at Index-%d:-",i+1);
		scanf("%d",&a[i]);
	}

	avg=avgn(a[0],a[1],a[2],a[3],a[4]);

	printf("The Average Is %.2f\n",avg);

	return 0;

}
```

Student Name:- Aryan Dilipbhai Langhanoja
Roll_No_:- 92200133030

Output:

```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programming A

Enter The Element at Index-1:-1
Enter The Element at Index-2:-2
Enter The Element at Index-3:-3
Enter The Element at Index-4:-4
Enter The Element at Index-5:-5
The Average Is 3.00

--------------------------------
Process exited after 3.998 seconds with return value 0
Press any key to continue . . .
```

Student Name:- Aryan Dilipbhai Langhanoja
Roll_No_:- 92200133030

Experiment: 4

Aim: Write a C program to obtain the greatest common divisor (GCD) of two integers using iterative and recursive methods.

Software: Dev C++

Code:-

```c
#include <stdio.h>

int hcf(int n1, int n2);

int main()
{
   int n1, n2;

   printf("Enter the First Number:-");
   scanf("%d", &n1);

   printf("Enter the Second Number:-");
   scanf("%d", &n2);

   printf("G.C.D of %d and %d is %d.", n1, n2, hcf(n1, n2));

   return 0;

}

int hcf(int n1, int n2)
{
   if (n2 != 0)
   {
      return hcf(n2, n1 % n2);
   }

   else
   {
      return n1;
   }
```

Student Name:- Aryan Dilipbhai Langhanoja
Roll_No_:- 92200133030

}

Output:-

Experiment: 5

Aim:- Write a function to generate the square of any given number

Software:- Dev C++

Code:-

```c
#include<stdio.h>

int square (int a)
{
        int ans;
        ans= a*a;
        return ans;
}

int main()
{
        int a;

        printf("Enter The Number:-");
        scanf("%d",&a);

        printf("The Square Of %d Is %d",a,square(a));

        return 0;

}
```
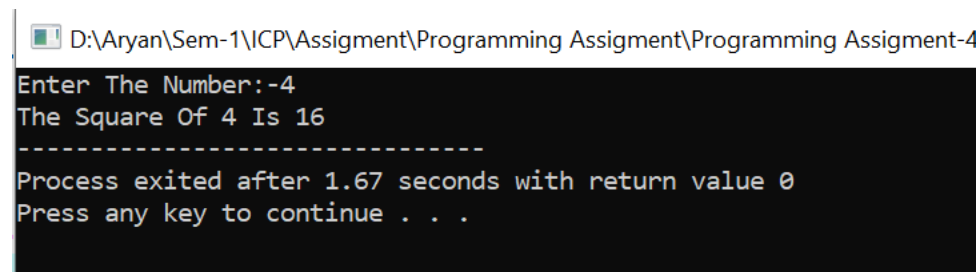
Output:-

```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programming Assigment-4
Enter The Number:-4
The Square Of 4 Is 16
--------------------------------
Process exited after 1.67 seconds with return value 0
Press any key to continue . . .
```

Student Name:- Aryan Dilipbhai Langhanoja
Roll_No_:- 92200133030