Aim Programs to input data through Command line argument.

Software Required:- Turbo C/C++

Theory:- Command-line arguments are given after the name of the program in command line-shell of operating systems.

To pass command line arguments, we typically define main() with two arguments; first argument is the number of command line arguments & second is list of command-line arguments.

Syntax:-

```
b.    int main (int argc, char * argv[])
      $
       /* ------- */
      }
```

In the above syntax;

- argc (Argument Count) is int and stores number of command line argument passed by the user including the name of the program. So if we pass a value to a program, value of argc would be 2 (one for argument & one for program name).
- The value of argc should be non negative.
- argv (argument vector) is array of character pointers listening all the argument.
- If argc is greater than zero, the array elements from argv[0] to

to argv [arg c-1] will contain pointer to strings.
- Argv [0] is the name of program, After that till argv [argc-1] every element is command-line argument.

Code

1.
```
#include <stdio.h>
#include <stdlib.h>
#include <conio.h>
void main ( int argc , char * argv [])
{
    clrscr();
    if (argc = 2)
    {
        printf("The command line argument is
        %s", argv[1]);
    }
    else if (argc > 2)
    {
        printf("More than 1 arguments");
    }
    else
    {
        printf("Please provide the arguments");
    }
    getch();
}
```

Output :-
After executing the program, go to DOS shell from FILE option.

```
C:\Turbo C 31 Bin>
C:\Turbo C 31 Bin>ed..
C:\Turbo C31>ed source
C:\Turbo C31\Source> program. exe
please provide the arguments.
C:\Turbo C31\Source > program is one
The command line argument is one
C:\Turbo C31\Source > program. exe
    one direction.

more than 1 argument
```

Output

After executing the program, go to DOS Shell from file option.

```
C:\Turbo C3\ Bin>
C:\ Turbo C3\ Bin > Cd.
C:\ Turbo C3\> cd source
C:\Turbo C3\ Source > program.exe
PLEASE PROVIDE THE ARGUMENTS
C:\Turbo C3\Source > program.exe 22
The sum of all commands line program
arguments is 22
C:\Turbo C3\ source > program.exe 22
                        21  24
The sum of all command line program
arguments is 67
```

Code.

```c
#include <stdio.h>
#include <conio.h>
#include <stdlib.h>
void main ( int argc, char * argv [])
{
    clrscr();
    int i, n;
    int sum = 0;
    if (argc = 1)
    {
        printf (" PLEASE PROVIDE THE COMMAND
                  LINE ARGUMENTS ");
    }
    for (i=1; i< argc; i++)
    {
        n = atoi (argv [i]);
        sum += n;
    }
    printf (" The sum of all command line
              arguments: %d \n", sum);
    geteh();
}
```