

COMPUTER NETWORK LAB
ASSIGNMENT-2

Q. Write a C program using command line argument to add two numbers.

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

```
int main (int argc, char* argv [])
```

```
{
```

```
    float a, b, i;
```

```
    if (argc == 3)
```

```
    {
```

```
        a = atof (argv[1]);
```

```
        b = atof (argv[2]);
```

```
        i = (float) a + (float) b;
```

```
        printf ("%2f", i);
```

```
    }
```

```
    elseif (argc == 2)
```

```
    {
```

```
        printf ("Input two numbers only. \n Error  
in Input \n");
```

```
    }
```

```
    else
```

```
    {
```

```
        printf ("argument list is empty. \n");
```

```
    }
```

```
    return 0;
```

```
}
```


2) Write a C program using command line argument to calculate the average of 5 numbers.

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

```
#include <stdlib.h>
```

```
int main ( int argc, char *argv[])
```

```
{
```

```
    float i = 0;
```

```
    if ( argc == 6)
```

```
    { for ( int k = 1; k < 6; k++ ) {
```

```
        i = atof ( argv[k] );
```

```
    }
```

```
    i = i / 5;
```

```
    printf ( "%2f", i );
```

```
}
```

```
else
```

```
{
```

```
    printf ( "argument list is empty, or either  
incomplete \n" );
```

```
}
```

```
return 0;
```

```
}
```

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3. Write a C program to assign values to each members of the following structure using command line arguments. Pass the populated structure to a function using call-by address and print values of each member of the structure with in that function.

```
struct info {  
    int roll-no;  
    char name[50];  
    float CGPA;  
};
```

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

```
#include <stdlib.h>
```

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

```
struct info {
```

```
    int roll-no;
```

```
    char name[50];
```

```
    float CGPA;
```

```
};
```

```
void print(struct info *ptu)
```

```
{  
    printf("Roll: %d\n", ptu->roll-no);
```

```
    printf("Name: %s\n", ptu->name);
```

```
    printf("CGPA: %.2f\n", ptu->CGPA);
```

```
}
```

```
int main (int argc, char *argv [])
```

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```

{
    struct info obl;
    if (argc == 4)
    {
        obl.roll_no = atoi(argv[1]);
        strcpy(obl.name, argv[2]);
        obl.CGPA = atof(argv[3]);
        print(&obl);
    }
    else
    {
        printf("argument list is empty, or not  
complete. Make sure to input  
Roll, name, CGPA in same sequence\n");
    }
    return 0;
}

```

OUTPUT

/a.out 1828225 Aishwarya 9.5

1828225
Aishwarya
9.5

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4) Write a C program to display the IP address and port number using command line argument.

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

int main ( int argc , char *argv[ ] )
{
    char *s = malloc ( strlen ( argv[1] ) + 1 );
    strcpy ( s, argv[1] );
    printf ( "IP address : %s \n", s );
    char *a = malloc ( strlen ( argv[2] ) + 1 );
    strcpy ( a, argv[2] );
    printf ( "Port number : %s", a );
    return 0;
}
```

OUTPUT

IP address : 192.168.0.1

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