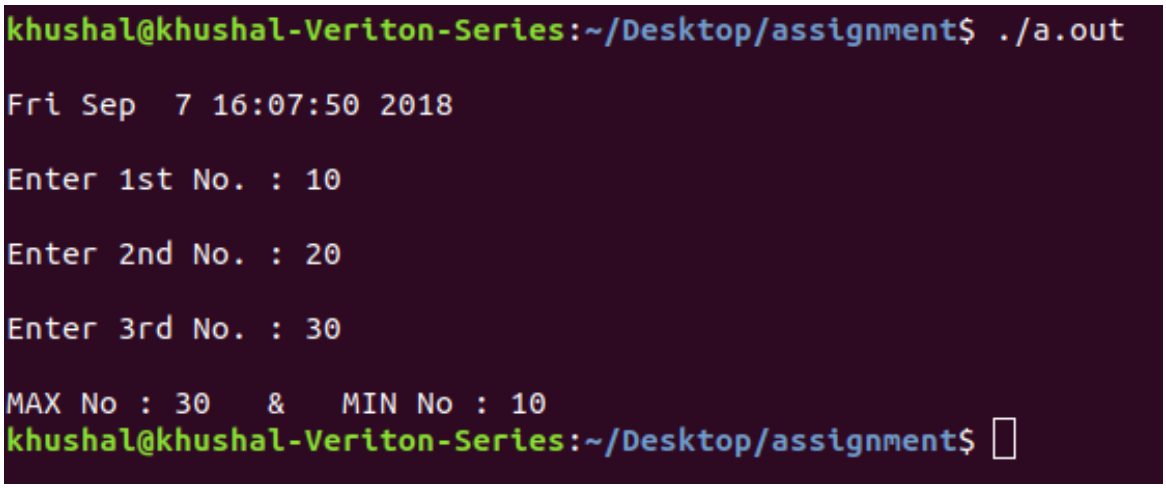
<*> To find the Maxima & Minima of 3 numbers using Ternary Operator.

>>> **Syntax :**

```
/* MIN & MAX of 3 NO.s using Ternary Operator */

#include<stdio.h>
#include <time.h>

void main()
{
	int min,max,a,b,c;
	timestamp();
	printf("Enter 1st No. : ");
	scanf("%d",&a);
	printf("\nEnter 2nd No. : ");
	scanf("%d",&b);
	printf("\nEnter 3rd No. : ");
	scanf("%d",&c);
	max = a>b ? (a>c ? a : c) : (b>c ? b : c);
	min = a<b ? (a<c ? a : c) : (b<c ? b : c);
	printf("\nMAX No : %d   &   MIN No : %d\n",max,min);
}

void timestamp()
{
	time_t clk = time(NULL);
	printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**



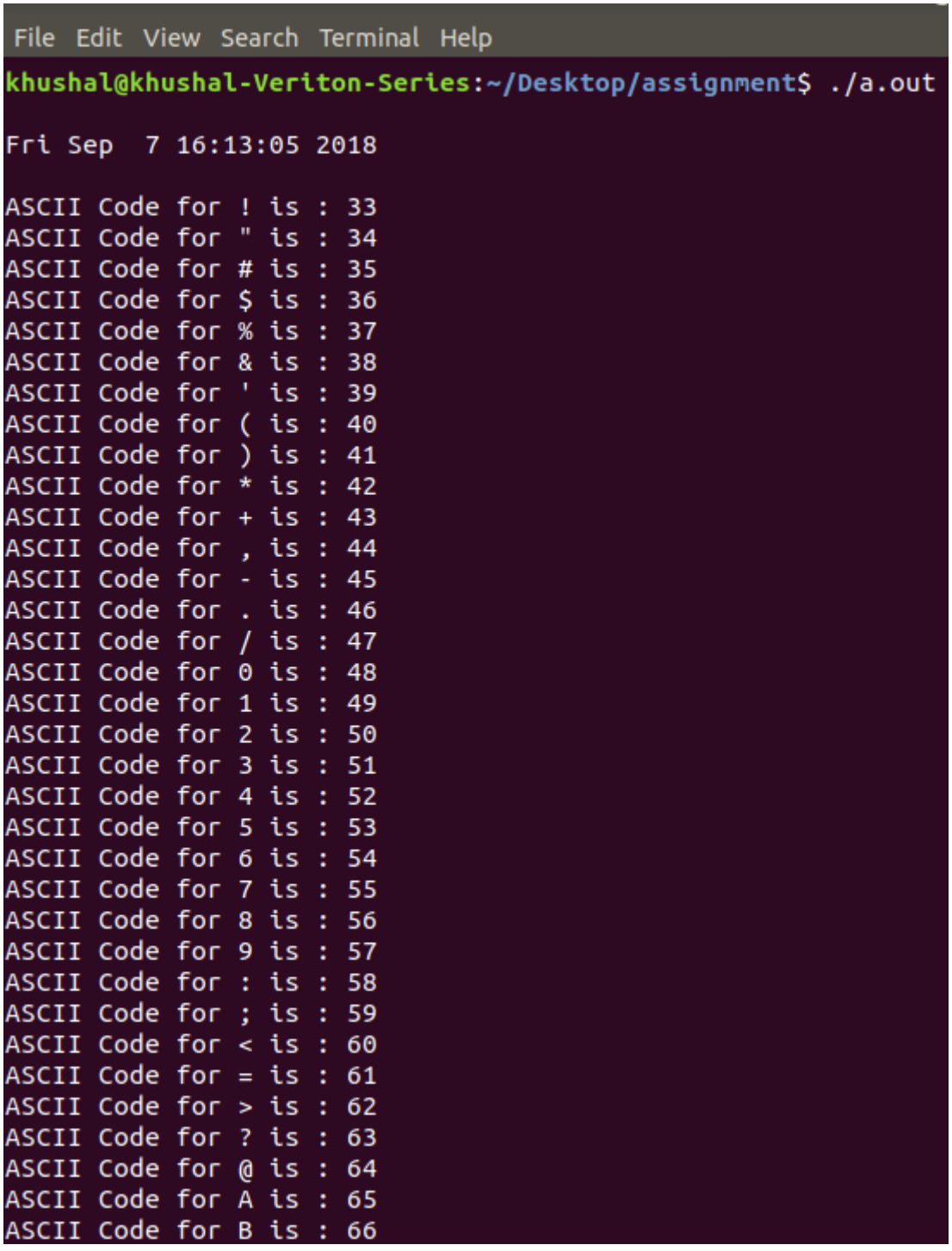
<*> To print the ASCII values.

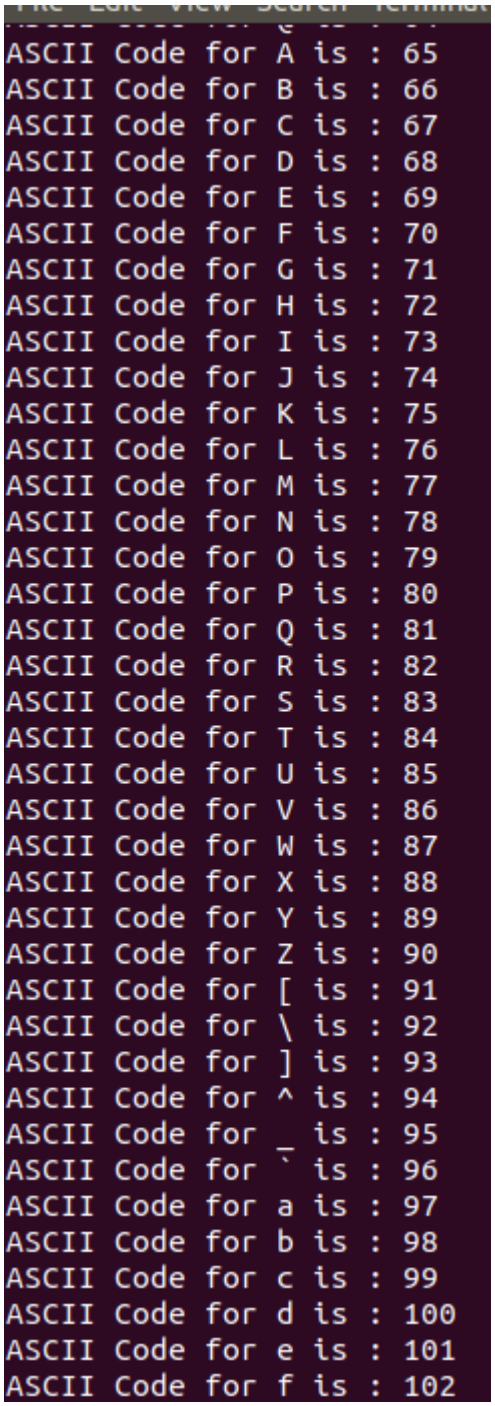
>>> **Syntax :**

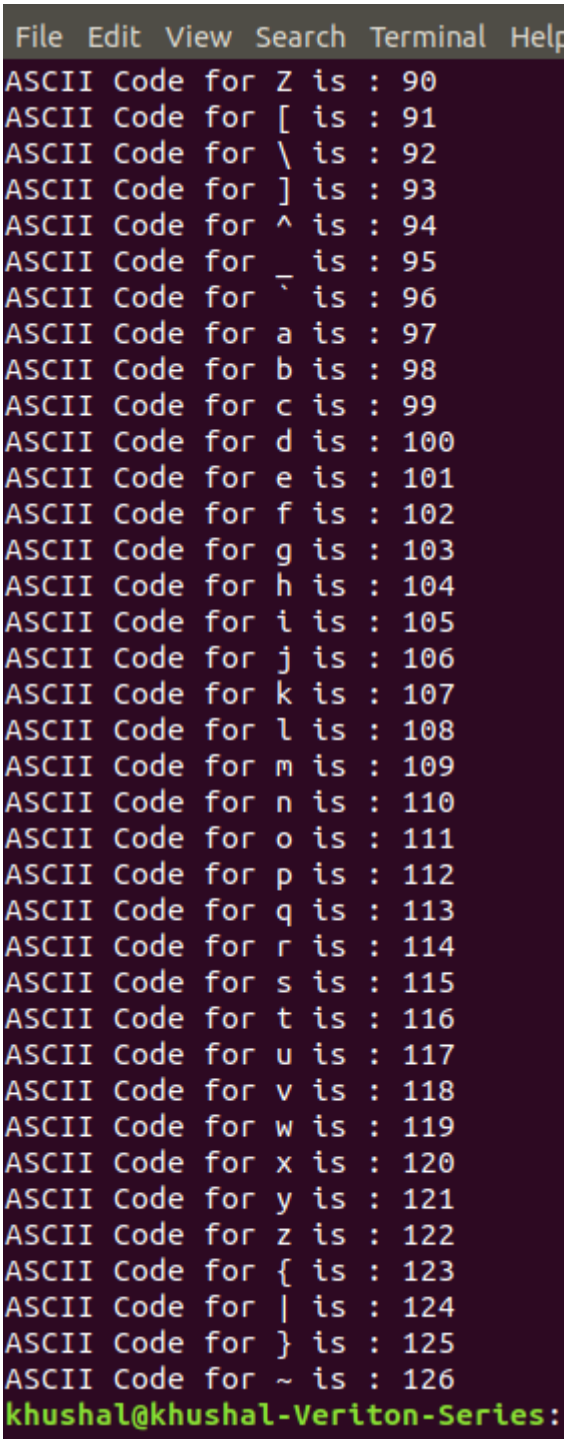
```
#include<stdio.h>
#include<time.h>

int main(void)
```

```
{
	timestamp();
	for(int i=33;i<127;i++)
		printf("ASCII Code for %c is : %d\n",i,i);
	return 0;
}

void timestamp()
{
	time_t clk = time(NULL);
	printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**







<*> To check for the Leap Year.

>>> **Syntax :**

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

int main(void)
{
        int year;
        timestamp();
```

```
	printf("Enter the Year :");
	scanf("%d",&year);
	if(year%100==0)
	{
		if(year%400==0)
			printf("\n%d is a Leap Year!\n\n",year);
		else
			printf("\n%d is NOT a Leap Year!\n\n",year);
	}
	else
	{
		if(year%4==0)
			printf("\n%d is a Leap Year!\n\n",year);
		else
			printf("\n%d is NOT a Leap Year!\n\n",year);
	}
	return 0;
}

void timestamp()
{
	time_t clk = time(NULL);
	printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**

```
khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 16:19:45 2018

Enter the Year :2100

2100 is NOT a Leap Year!

khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 16:19:55 2018

Enter the Year :2016

2016 is a Leap Year!

khushal@khushal-Veriton-Series:~/Desktop/assignment$
```

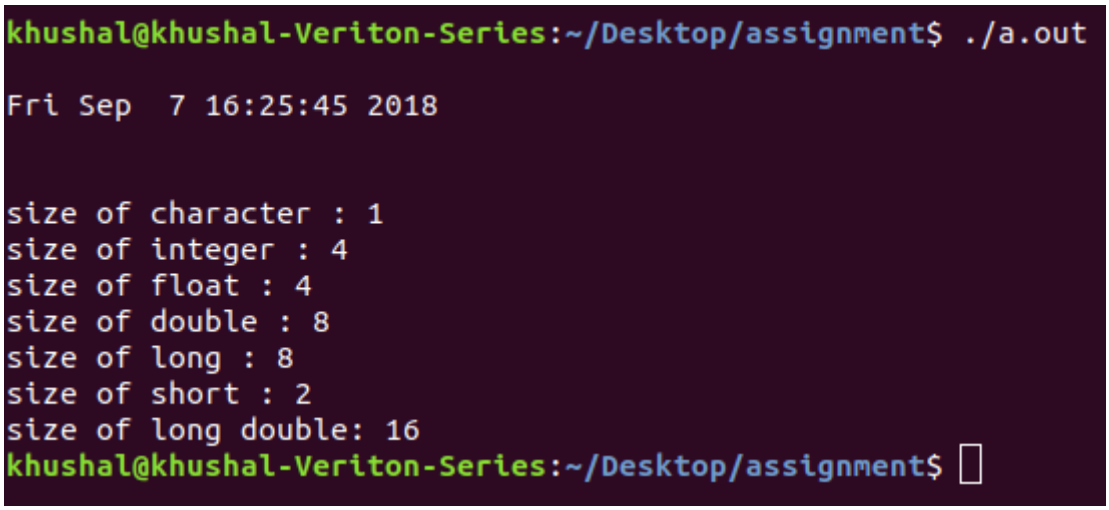
<*> To print the size of variables.

>>> **Syntax :**

```
//* Long & Short Int size */

#include<stdio.h>
```

```
#include<time.h>

int main(void)
{
	timestamp();
	printf("\nsize of character : %ld",sizeof(char));
	printf("\nsize of integer : %ld",sizeof(int));
	printf("\nsize of float : %ld",sizeof(float));
	printf("\nsize of double : %ld",sizeof(double));
	printf("\nsize of long : %ld",sizeof(long));
	printf("\nsize of short : %ld",sizeof(short));
	printf("\nsize of long double: %ld\n",sizeof(long double));
	return 0;
}

void timestamp()
{
	time_t clk = time(NULL);
	printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**



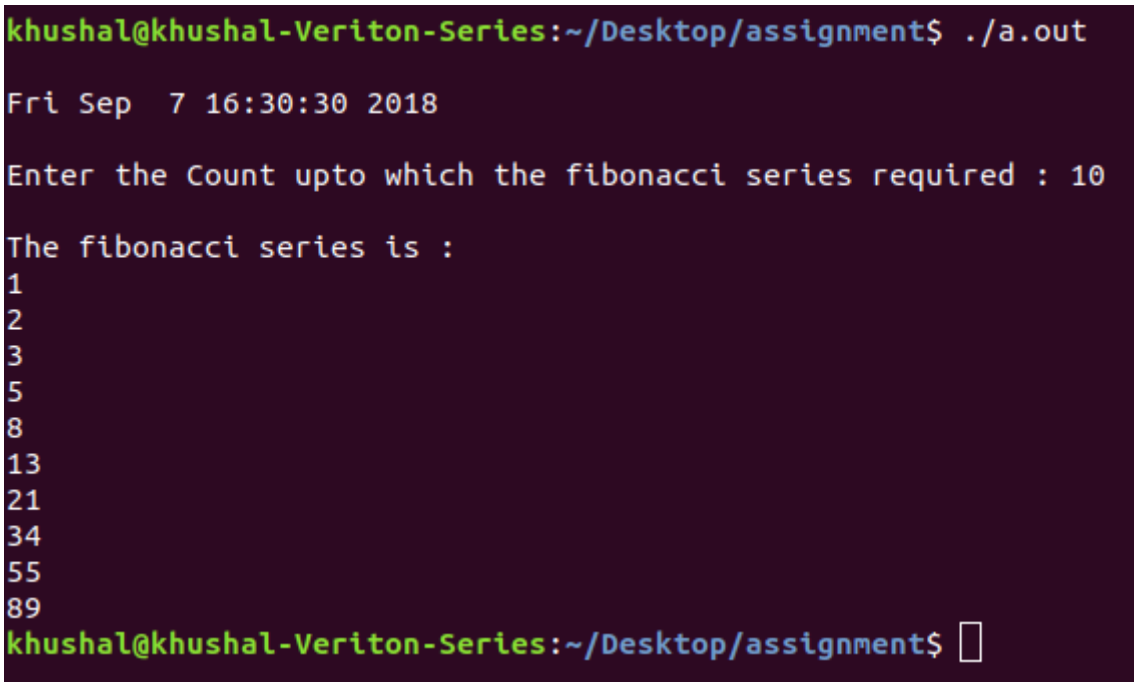
<*> To print the Fibonacci Series (as per the user input) .

>>> **Syntax :**

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

int main(void)
{
	int count,a=1,b=1,i=1;
	timestamp();
	printf("Enter the Count upto which the fibonacci series required : ");
	scanf("%d",&count);
	printf("\nThe fibonacci series is : \n%d",b);
```

```
        while(i<count)
        {
                b=a+b;
                a=b-a;
                printf("\n%d",b);
                i++;
        }printf("\n");
        return 0;
}

void timestamp()
{
        time_t clk = time(NULL);
        printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**



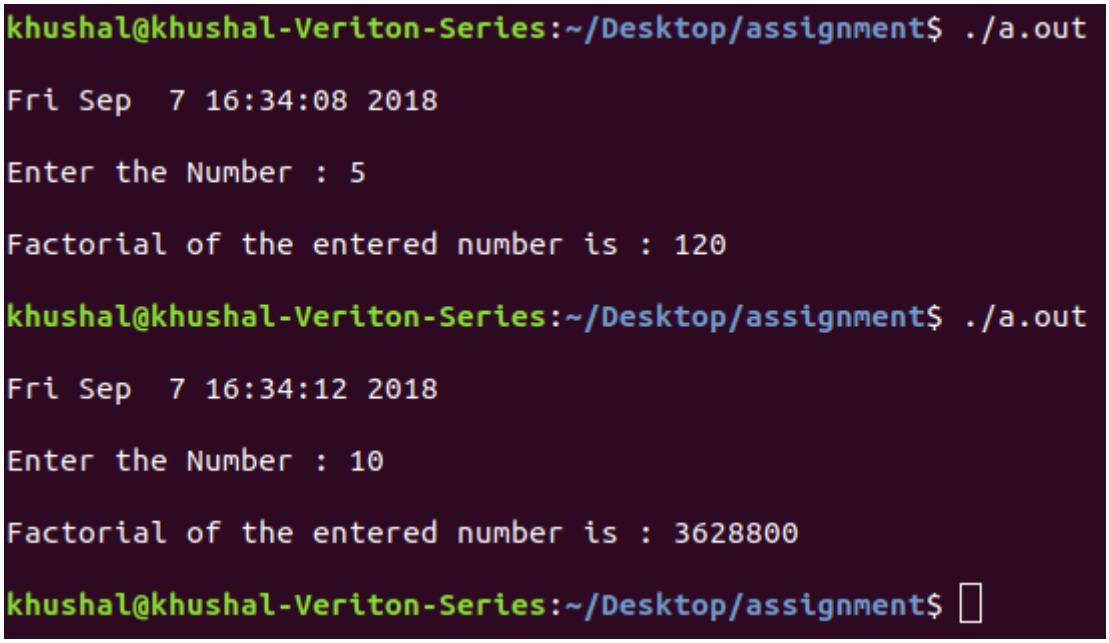
<*> To print the Factorial of the entered number.

>>> **Syntax :**

```
/*      To calculate the factorial of the entered number      */

#include<stdio.h>
#include<time.h>

int main(void)
{
        int num,fact,i=1;
        timestamp();
```

```
	printf("Enter the Number : ");
	scanf("%d",&num);
	fact=num;
	while(i<num)
	{
		fact=fact*i;
		i++;
	}
	printf("\nFactorial of the entered number is : %d\n\n",fact);
	return 0;
}

void timestamp()
{
	time_t clk = time(NULL);
	printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**



<*> To perform Integer, String & Float input formatting.

>>> **Syntax :**

```
/* INT ,STR ,Float formatting */

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

int main(void)
{
	int num1,choice;
	char name[50];
	float num2;
```

```
        timestamp();
        printf("\n 1. Integer \n 2. String \n 3. Float \n");
        printf("\n Enter your Choice : ");
        scanf("%d",&choice);
        switch(choice)
        {
        case 1:
                printf("\n1. Enter Number (INT) : ");
                scanf("%d",&num1);
                printf("\nEntered Number : %d",num1);
                printf("\nStarting with blanks : %10d",num1);
                printf("\nStarting with zeros : %010d",num1);
                printf("\nDifferent radices ::  hexadecimal-%#x   octal-%#o\n\n",num1,num1);
                break;

        case 2:
                printf("\n2. Enter Name : ");
                scanf("%s",&name);
                printf("\nEntered Name : %s",name);
                printf("\nStarting with blanks : %10s",name);
                printf("\nStarting 4 digits only : %.4s\n\n",name);
                break;

        case 3:
                printf("\n3. Enter Number (FLOAT) : ");
                scanf("%f",&num2);
                printf("\nEntered Number : %f",num2);
                printf("\nStarting 2 decimals only : %0.2f",num2);
                printf("\nStarting with zeros : %010f",num2);
                printf("\nWth exp. : %0.4f %+.0e \n\n",num2);
                break;

        }
        return 0;
}

void timestamp()
{
        time_t clk = time(NULL);
        printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**

```
khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 16:55:28 2018


 1. Integer
 2. String
 3. Float

 Enter your Choice : 1

1. Enter Number (INT) : 100

Entered Number : 100
Starting with blanks :        100
Starting with zeros : 0000000100
Different radices ::  hexadecimal-0x64   octal-0144

khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out
```

```
khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 16:55:33 2018


 1. Integer
 2. String
 3. Float

 Enter your Choice : 2

2. Enter Name : khushal

Entered Name : khushal
Starting with blanks :    khushal
Starting 4 digits only : khus
```

```
khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 16:55:40 2018


 1. Integer
 2. String
 3. Float

 Enter your Choice : 3

3. Enter Number (FLOAT) : 3.148796

Entered Number : 3.148796
Starting 2 decimals only : 3.15
Starting with zeros : 003.148796
Wth exp. : 3.1488 +1e-129

khushal@khushal-Veriton-Series:~/Desktop/assignment$
```

<*> To perform Multiplication & Division without using operators.

>>> Syntax :

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

int main(void)
{
        float num1,num2,prod=0,qot=0;
        int choice;
        timestamp();
        printf("\nTo perform :\n1.[a*b] \n2.[a/b] ");
        printf("\nEnter the Choice:");
        scanf("%d",&choice);
        switch(choice)
        {
        case 1:
                printf("\nEnter the Number1 (a):");
                scanf("%f",&num1);
                printf("\nEnter the Number2 (b):");
                scanf("%f",&num2);
```

```
                for(int i=1;i<=num2;i++)
                {
                        prod+=num1;
                }
                printf("\nProduct :: %f\n",prod);
                break;
        case 2:
                printf("\nEnter the Divisor (a):");
                scanf("%f",&num1);
                printf("\nEnter the Divident (b):");
                scanf("%f",&num2);
                for(int i=1;num1>=num2;i++)
                {
                        num1-=num2;
                        qot++;
                }
                printf("\nQuotient : %f & Remainder : %f \n\n",qot,num1);
                break;
        }
return 0;
}

void timestamp()
{
        time_t clk = time(NULL);
        printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**

```
khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 17:13:10 2018


To perform :
1.[a*b]
2.[a/b]
Enter the Choice:1

Enter the Number1 (a):15

Enter the Number2 (b):20

Product :: 300.000000
khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 17:13:23 2018


To perform :
1.[a*b]
2.[a/b]
Enter the Choice:2

Enter the Divisor (a):78

Enter the Divident (b):39

Quotient : 2.000000 & Remainder : 0.000000

khushal@khushal-Veriton-Series:~/Desktop/assignment$
```

<*> To perform operations with the digits of the number.

>>> **Syntax :**

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

int main(void)
{
	long long int num;
	timestamp();
	printf("\nEnter the number : ");
	scanf("%lld",&num);
	printf("\nNumber in discrete form :\n");
	int disc=num,count=1,ams=0;
	while(disc>=10)
	{
		int a;
		a = disc%10;
		printf("%d\n",a);
		ams+=a*a*a;			//checking Amstrong
		count++;			//Count of digits
		disc/=10;
	}printf("%d\n",disc);
	ams+=disc*disc*disc;
	printf("\nTotal number of Digits : %d",count);
	int prod=multiply(num);
	int sum=add(num);
	printf("\nSum of Digits : %d",sum);
	printf("\nProduct of Digits : %d\n",prod);
	if(ams==num)
		printf("This is an Amstrong Number!\n\n");
	else
		printf("This is not an Amstrong Number!\n\n");
	return 0;
}

int add(no)		//Addition of digits
{
	long long int sum,disc=no;
	sum=0;
	while(disc>=10)
	{
		int rem=disc%10;
		sum+=rem;
		disc/=10;
	}sum+=disc;
	return sum;
}

int multiply(no)		//Product of digits
{
	long long int prod,disc=no;
	prod=1;
	while(disc>10)
	{
		int rem=disc%10;
		prod*=rem;
```

```
            disc/=10;
        }prod*=disc;
        return prod;
}

void timestamp()
{
        time_t clk = time(NULL);
        printf("\n%s\n", ctime(&clk));
}
```

>>> **Output :**

```
khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 17:18:08 2018


Enter the number : 813018

Number in discrete form :
8
1
0
3
1
8

Total number of Digits : 6
Sum of Digits : 21
Product of Digits : 0
This is not an Amstrong Number!

khushal@khushal-Veriton-Series:~/Desktop/assignment$ ./a.out

Fri Sep  7 17:18:32 2018


Enter the number : 153

Number in discrete form :
3
5
1

Total number of Digits : 3
Sum of Digits : 9
Product of Digits : 15
This is an Amstrong Number!

khushal@khushal-Veriton-Series:~/Desktop/assignment$
```