51. Triangle with only border

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

```
    *
   * *
  *   *
 *     *
*       *
* * * * * *
```

```c
void drawTriangle(char border, char filler, int length)
{
    int start = 2;
    int base = 4;
    int i, sp, j, b;
    for (i = start; i <= length; i++)
    {
        for (sp = 0; sp <= length - i; sp++)
        {
            printf(" ");
        }
        if (i > start)
        {
            printf("%c ", border);
        }
        if (i > start)
        {
            for (b = base; b <= i; b++)
            {
                printf("%c ", filler);
            }
        }
        printf("%c \n", border);
    }

    for (j = base; j < length + base; j++)
    {
        printf("%c ", border);
    }
    printf("\n");
}

void main()
{
    int length = 6;
    clrscr();
    drawTriangle('*', ' ', length);
    getch();
```

```
}
```

52. Program to accept number and print it's factorial.

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

void main()
{

    int i, fact=1, n;
    clrscr();

    printf("Enter number : ");
    scanf("%d", &n);

    for(i=1; i<=n; i++)
    {
        fact = fact*i;
    }
    printf("Factorial is: %d", fact);
    getch();
}
```

53. Program to accept number and print if it is prime number or not.

```c
#include<stdio.h>
#include<conio.h>
void main()
{
int i, n;
clrscr();
printf("Enter number : ");
scanf("%d", &n);

for(i=2; i<=n/2; i++)
   {
      if(n%i==0)
      {
         printf("Number is not Prime");
         getch();
         break;
      }
   }
   printf("Number is Prime");
   getch();
}
```

54. Program to print 'n' prime numbers.

```c
#include<stdio.h>
#include<conio.h>
#include<process.h>
void main()
{
int i, j, flag=1, n;
clrscr();
printf("Enter number : ");
scanf("%d", &n);

for(i=2; i<=n; i++)
{
   flag=1;
   for(j=2; j<=i/2; j++)
   {
      if(i%j==0)
      {
         flag=0;
         break;
      }
   }
   if(flag==1)
   printf("%d\n", i);
}
getch();
}
```

55. Program to accept a number and print Fibonacci sequence.

```c
#include<stdio.h>
#include<conio.h>
void main()
{
int pre=1, cur=1, temp, i, n;
//pre means previous number
//cur means current number
clrscr();
printf("Enter number : ");
scanf("%d", &n);
printf("%d\t%d", pre, cur);

for(i=3; i<=n; i++)
{
   temp = cur;
   cur = pre + cur;
   pre = temp;
   printf("\t%d", cur);
}
```

```c
getch();
}
```

56. Add 'n' numbers.

```c
#include<stdio.h>
#include<conio.h>
void main()
{
  int n, sum=0, i, value;
  clrscr();

  printf("Enter total numbers you want to add : ");
  scanf("%d", &n);

  for (i=1; i<=n; i++)
  {
    printf("Enter number %d : ", i);
    scanf("%d", &value);
    sum = sum + value;
  }

  printf("Sum of entered numbers : %d", sum);
  getch();
}
```

57. Add 'n' numbers using array.

```c
#include<stdio.h>
#include<conio.h>
void main()
{
  int n, sum = 0, i, array[100];
  clrscr();
  printf("Enter total numbers you want to add : ");
  scanf("%d", &n);

  for (i = 1; i <= n; i++)
  {
    printf("Enter number %d : ", i);
    scanf("%d", &array[i]);
    sum = sum + array[i];
  }
  printf("Sum : %d\n", sum);
  getch();
}
```

58. Program to accept a number and add the digits of that number.

```c
#include<stdio.h>
#include<conio.h>
void main()
{
int n, sum = 0, remainder;
clrscr();

printf("Enter the number : ");
scanf("%d", &n);

while (n != 0)
{
 remainder = n % 10;
 sum = sum + remainder;
 n = n / 10;
}

printf("Sum of digits of entered number : %d", sum);
getch();
}
```

59. Program to accept a number and add the digits of that number using recursion.

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

int add_digits(int);

void main()
{
   int n, result;
   clrscr();
   printf("Enter a number : ");
   scanf("%d", &n);

   result = add_digits(n);

   printf("Sum : %d", result);
   getch();
}

int add_digits(int n)
{
   static int sum = 0;
   if (n == 0)
   {
      return 0;
   }
```

```c
    sum = n % 10 + add_digits(n / 10);
    return sum;
}


60. Average of numbers.

#include<stdio.h>
#include<conio.h>
void main()
{
    int n, i;
    float sum=0, x, avg;
    clrscr();
    printf("Enter total Numbers : ");
    scanf("%d", &n);
    for (i = 1; i <= n; i++)
    {
        printf("\nNumber %d : ", i );
        scanf("%f", &x);
        sum += x;
    }
    avg = sum / n;
    printf("\nThe Average is : %0.2f", avg);
    getch();
}
```

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