

C Problems

Following table show the range of ASCII values of various characters:

Characters	ASCII Values
A-Z	65-90
A-z	97-122
0-9	48-57
Special symbols	0-47, 58-91, 91-96, 123-127

Calculate area of triangle by $s = \sqrt{s(s-a)(s-b)(s-c)}$. WAP
where $s = a+b+c/2$

```
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
int a,b,c,s,area;
scanf("%d%d%d",&a,&b,&c);
s=(a+b+c)/2;
area=sqrt(s*(s-a)*(s-b)*(s-c));
printf("area=%d",area);
getch();
}
```

WAP to print fibonacci series 1,1,2,3,5,8,13...

```
#include<stdio.h>
#include<conio.h>
void main()
{
int x=1,y=1,z;
clrscr();
printf("%d %d",x,y);
for(i=1;i<10;i++)
{
z=x+y;
printf("%d",z);
x=y;
y=z;
}
getch();
}
```

Write a program to check armstrong number

```
#include<stdio.h>
#include<conio.h>
void main()
{
int num,n,cube,rem,sum;
clrscr();
for(num=100;num<=999;num++)
{
    n=num;
    sum=0;
    while(n>0)
    {
        rem=n%10;
        n=n/10;
        cube=rem*rem*rem;
        sum=sum+cube;
    }
    if(num==sum)
        printf("armstrong no.");
    else
        printf("not armstrong no");
}
getch();
}
```

WAP to compute prime number

```
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
    int i,num,flag=1;
    clrscr();
    scanf("%d",&num);
    for(i=2;i<sqrt(num);i++)
    {
        if(num%i==0)
        {
            printf("no. not prime");
            flag=0;
            break;
        }
    }
    if(flag==1)
        printf("num prime");
    getch();
}
```

WAP to add first seven terms of the following series
 $1/1!+2/2!+3/3!+...$

```
#include<stdio.h>
#include<conio.h>
void main()
{
float i=1,j,fact;
float sum=0;
clrscr();
while(i<=7)
{
    fact=1;
    for(j=1;j<=i;j++)
        fact=fact*j;
    sum=sum+i/fact;
    i++;
}
printf("\n%f",sum);
getch();
}
```