**1.矩阵乘法**

#include<bits/stdc++.h>

using namespace std;

int main()

{

int a[31][31],ans[31][31],n,m,i,j,k,x,y;

memset(ans,0,sizeof(ans));

cin>>n>>m;

for(i=1;i<=n;i++)

for(j=1;j<=n;j++)

cin>>a[i][j];

for(i=1;i<=n;i++)

for(k=1;k<=m-1;k++)

{

for(i=1;i<=n;i++)

for(j=1;j<=n;j++)

for(x=1;x<=n;x++) ans[i][j]+=a[i][x]\*a[x][j];

}

for(i=1;i<=n;i++)

{

for(j=1;j<=n;j++) cout<<ans[i][j]<<" ";

cout<<endl;

}

}

**2.单词个数**

#include<iostream>

#include<stdio.h>

#include<string.h>

using namespace std;

int isalpha(char);

int main()

{

char s[10001];

gets(s);

int len=strlen(s),i,zt1=0,ans=0;

for(i=0;i<len;i++)

{

if (s[i]>=65&&s[i]<=90) s[i]+=32;

if (isalpha(s[i])==1&&zt1==0) zt1=1;

if (zt1==1&&isalpha(s[i])==0)

{

zt1=0;

ans++;

}

}

if (zt1) ans++;

cout<<ans<<endl;

}

int isalpha(char c)

{

if (c>=97&&c<=122) return 1;

else return 0;

}

**3.十进制转十六进制**

#include<iostream>

#include<stdio.h>

#include<string.h>

using namespace std;

int main()

{

int a,i,temp;

cin>>a;

string s="",t="";

while (a!=0)

{

temp=a%16;

a/=16;

if (temp<10) s+=temp+'0';

else s+=temp+55;

}

for(i=0;i<s.length();i++) t+=s[s.length()-i-1];

cout<<t;

}

**4.预测排名**

#include<iostream>

#include<stdio.h>

using namespace std;

int main()

{

int a,b,c,d,jia,yi,bing;

for(a=1;a<=4;a++)

{

for(b=1;b<=4;b++)

{

if (b==a) continue;

for(c=1;c<=4;c++)

{

if (c==a||c==b) continue;

for(d=1;d<=4;d++)

{

jia=yi=bing=0;

if (d==a||d==b||d==c) continue;

if (a==1) jia++;

if (b==2) jia++;

if (c==1)yi++;

if (b==3) yi++;

if (d==2) bing++;

if (a==3) bing++;

if (jia==1&&yi==1&&bing==1)

{

cout<<"A的名次是"<<a<<endl<<"B的名次是"<<b<<endl<<"C的名次是"<<c<<endl<<"D的名次是"<<d<<endl;

return 0;

}

}

}

}

}

}

**5.Fibonacci数列**

#include<iostream>

#include<stdio.h>

using namespace std;

int main()

{

int i=3,x=1,y=1,n,cur,ans=1;

cin>>n;

if (n==1) cout<<1;

else if (n==2) cout<<1;

else

{

while (i<=n)

{

x=ans;

ans+=y;

y=x;

i++;

}

cout<<ans%10007;

}

}

**6.周期字串**

#include<iostream>

#include<stdio.h>

#include<string.h>

using namespace std;

int main()

{

string s,compare;

cin>>s;

int i,j,ptr1,len1=s.length(),ans=len1,len2,sen=0;

for(i=1;i<=len1;i++)

{

if (len1%i!=0) continue;

compare="";sen=0;

for(j=0;j<i;j++) compare+=s[j];

len2=compare.length();

ptr1=0;

for(j=0;j<len1;j++)

{

if (s[j]!=compare[ptr1])

{

sen=1;

break;

}

ptr1++;

if (ptr1==len2) ptr1=0;

}

if (ptr1==0&&sen==0)

{

cout<<i<<endl;

break;

}

}

}

**7.高精度加法**

#include<iostream>

#include<stdio.h>

#include<string.h>

using namespace std;

int main()

{

string s1,s2,ans="",t="";

cin>>s1;

cin>>s2;

int i,j,count,temp=0,num1[101],num2[101],len1=s1.length(),len2=s2.length();

if (len1<len2)

{

swap(len1,len2);

swap(s1,s2);

}

for(i=len1-1;i>=0;i--) num1[len1-i]=s1[i]-'0';

for(i=len2-1;i>=0;i--) num2[len2-i]=s2[i]-'0';

for(i=1;i<=len1;i++)

{

if (i>len2) num2[i]=0;

count=num1[i]+num2[i]+temp;

if (count<=9)

{

t+=count+'0';

temp=0;

}

else

{

t+=count-10+'0';

temp=1;

}

}

if (temp) t+='1';

for(j=0;j<t.length();j++) ans+=t[t.length()-j-1];

cout<<ans<<endl;

}

**8.龟兔赛跑预测**

#include<iostream>

#include<stdio.h>

using namespace std;

int main()

{

int v1,v2,t,s,l,i,RL=0,TL=0,rest=0,resume=0;

cin>>v1>>v2>>t>>s>>l;

int final=l/v2;

for(i=1;i<=final;i++)

{

if (rest==1&&i>resume) rest=0;

TL+=v2;

if (rest==0) RL+=v1;

if ((RL-TL)>=t)

{

rest=1;

resume=i+s;

}

if (RL>=l&&TL<l)

{

cout<<"R"<<endl<<i;

return 0;

}

}

if (RL==TL)cout<<"D"<<endl<<final;

else cout<<"T"<<endl<<final;

}