Q4- [write](javascript:void(0);) a program to input a no. and [test](javascript:void(0);) [weather](javascript:void(0);) it is [prime](javascript:void(0);) or not.  
ans::::  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
int n,i,b=0;  
cin>>n;  
for(i=1;i<=n;i++)  
{  
if(n%i==0)  
b++;  
}  
if(b==2)  
cout<<n<<"  is prime.";  
else  
cout<<n<<"  is not prime.";  
getch();  
}

Q5:- perfect no.,  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
int n,i,c=0;  
cin>>n;  
for(i=1;i<=n/2;i++)  
{  
if(n%i==0)  
c=c+i;  
}  
if(c==n)  
cout<<n<<"\t is perfect no.";  
else  
cout<<n<<"\t is not a perfect no.";  
getch();}

Q6:- to display factorial  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
int i,n;  
cin>>n;  
if(n>0)  
{  
for(i=n-1;i>0;i--)  
{  
n=n\*i;  
}  
cout<<"factorial of inputed no. is"<<n;  
}  
if(n==0)  
cout<<"factorial = 1";  
if(n<0)  
cout<<"factorial of negative no. is not defined";  
getch();  
}

Q7:- sum of digits  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
[long](javascript:void(0);) n,b,a=0;  
cin>>n;  
while(n>0)  
{  
b=n%10;  
a=a+b;  
n=n/10;  
}  
cout<<a;  
getch();}

ans 8- palindrome number  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
long a,k,s=0,t;  
cout<<"enter the no.,\t";  
cin>>a;  
k=a;  
while(a>0)  
{  
t=a%10;  
s=t+(10\*s);  
a/=10;  
}  
if(s==k)  
cout<<"\n no., is palindrome";  
else  
cout<<"\n no., is not a palindrome";  
getch();  
}

ans 9(a)-  [pattern](javascript:void(0);)  
  
  
#include<iostream.H>  
#include<conio.h>  
void main()  
{  
clrscr();  
int i,j;  
for(i=1;i<=5;i++)  
{  
for(j=1;j<=i;j++)  
cout<<j;  
cout<<endl;  
}  
getch();}

ans 9(b)- pattern  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
int i,j;  
for (i=5;i>=1;i--)  
{  
for(j=2;j<=i;j++)  
cout<<" ";  
for(j=5;j>=i;j--)  
cout<<j;  
cout<<"\n";  
}  
getch();}

ans 9(c)- pattern  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
int i,j,k;  
for(i=1;i<=5;i++)  
{  
for(j=4;j>=i;j--)  
cout<<" ";  
j=1;  
for(k=1;k>0;)  
{  
cout<<k;  
if(j==0)  
{  
k--;  
continue;  
}  
if(k<i)  
k++;  
else  
{  
k--;  
j=0;  
}  
}  
cout<<"\n";  
}  
getch();}

ans 9(d)- pattern  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
int i,j,k;  
for(i=1;i<=5;i++)  
{  
for(j=2;j<=i;j++)  
cout<<" ";  
j=1;  
for(k=5;k<6;)  
{  
cout<<k;  
if(j==0)  
{  
k++;  
continue;  
}  
if (k>i)  
k--;  
else  
{  
k++;  
j=0;  
}  
}  
cout<<"\n";  
}  
getch();  
}

[ANS](javascript:void(0);) 10- FIBONACCI [SERIES](javascript:void(0);)  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
[int](javascript:void(0);) a=0,b=1,c=0,n;  
[cin](javascript:void(0);)>>n;  
cout<<a<<" "<<b<<" ";  
while(c<=n)  
{  
c=a+b;  
if(c>n)  
break;  
cout<<c<<" ";  
a=b;  
b=c;  
}  
getch();}

ANS 11- [PRIME](javascript:void(0);) NOS., BETWEEN RANGE  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
clrscr();  
int f,l,i,j,c=0;  
cout<<"entre the range\t";  
cin>>f>>l;  
for(i=f;i<=l;i++)  
{  
for(j=1;j<=i;j++)  
{  
if(i%j==0)  
c++;  
}  
if(c==2)  
cout<<i<<" ";  
c=0;  
}  
getch();  
}

ANS 13-   
  
  
  
//ans 13  
#include<iostream.h>  
#include<conio.h>  
#include<stdio.h>  
#include<string.h>  
void main()  
{  
char a[100];  
int i,j,k;  
gets(a);  
k=strlen(a);  
for(i=0;i<k;i++)  
{  
for(j=0;j<=i;j++)  
{  
cout<<a[j];  
}  
cout<<"\n";  
j=0;  
}  
getch();}

ANS 14-  
  
  
//ans 14  
#include<iostream.h>  
#include<conio.h>  
#include<stdio.h>  
#include<string.h>  
void main()  
{  
char [ch](javascript:void(0);)[100];  
int i,k;  
gets(ch);  
k=strlen(ch);  
for(i=0;i<k;i++)  
{  
if((ch[i]>96)&&(ch[i]<123))  
{  
ch[i]=ch[i]-32;  
cout<<ch[i];  
}  
else  
cout<<ch[i];  
}  
getch();}

ANS 15(a)  
  
  
#include<iostream.h>  
#include<conio.h>  
#include<stdio.h>  
#include<string.h>  
void main()  
{  
char s1[100],s2[100];  
int x;  
gets(s1);  
strcpy(s2,s1);  
strrev(s1);  
x=strcmp(s1,s2);  
if(x==0)  
cout<<"palindrome";  
else  
cout<<"non palindrome";  
getch();}

ANS 16  
  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{  
int a[10],b=0,c=0,i,avg;  
while(b<10)  
{  
cin>>a[b];  
b++;  
}  
clrscr();  
for(i=0;i<10;i++)  
c=c+a[i];  
avg=c/10;  
cout<<c<<"\n"<<avg;  
getch();  
}

ans 18  
  
  
#include<iostream.h>  
void main()  
{  
int a[5],n,s,e,m,i;  
cout<<"input nos.,";  
for(i=0;i<5;i++)  
cin>>a[i];  
cout<<"enter no.,";  
s=a[0];  
e=a[4];  
m=(e+s)/2;  
cin>>n;  
while((n>s)&&(n<e))  
{  
if(n>m)  
{  
s=m;  
m=(s+e)/2;  
}  
if(n<m)  
{e=m;  
m=(s+e)/2;  
}  
if(n==m)  
{cout<<"found";  
break;  
}  
}  
if(n!=m)  
cout<<"not found";  
}

ans 21  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{       clrscr();  
int x[3][3],y[3][3],z[3][3],r,c;  
for(r=0;r<3;r++)  
{  
for(c=0;c<3;c++)  
cin>>x[r][c];  
}  
for(r=0;r<3;r++)  
{  
for(c=0;c<3;c++)  
cin>>y[r][c];  
}  
  
clrscr();  
cout<<"array 1\n";  
for(r=0;r<3;r++)  
{  
for(c=0;c<3;c++)  
cout<<x[r][c]<<"   ";  
cout<<endl;  
}  
cout<<endl<<endl<<endl;  
cout<<"array 2\n";  
for(r=0;r<3;r++)  
{  
for(c=0;c<3;c++)  
cout<<y[r][c]<<"   ";  
cout<<endl;  
}  
  
getch();  
clrscr();  
  
cout<<"sum of arrays is \n\n";  
for(r=0;r<3;r++)  
{  
for(c=0;c<3;c++)  
{  
z[r][c]=x[r][c]+y[r][c];  
cout<<z[r][c]<<"  ";  
}  
cout<<'\n';  
}  
getch();  
}

ans 22  
  
#include<iostream.h>  
#include<conio.h>  
void main()  
{       clrscr();  
int a[3][3], b[3][3], c[3][3],k,i,j;  
cout<<"\n Enter the elements of [matrix](javascript:void(0);) a:\n";  
for (i=0;i<3;i++)  
for(j=0;j<3;j++)  
cin>>a[i][j];  
cout<<"\nEnter the elements of matrix b:\n";  
for (i=0;i<3;i++)  
for(j=0;j<3;j++)  
cin>>b[i][j];  
cout<<"\nmatrix a is:";  
for (i=0;i<3;i++)  
{ cout<<"\n";  
for (j=0;j<3;j++)  
cout<<a[i][j]<<" ";  
}  
cout<<"\nmatrix b is:";  
for (i=0;i<3;i++)  
{ cout<<"\n";  
for (j=0;j<3;j++)  
cout<<b[i][j]<<" ";  
}  
cout<<"\nproduct of two matrices :";  
for(i=0;i<3;i++)  
{  
cout<<"\n";  
for(j=0;j<3;j++)  
{  
c[i][j]=0;  
for(k=0;k<3;k++)  
c[i][j]=c[i][j]+a[i][k]\*b[k][j];  
cout<<c[i][j]<<" ";  
}  
}  
getch();  
}