实验4

1.

#include <iostream>

using namespace std;

int main()

{int n,sum=0;

for(n=1;;sum+=n,n+=2)

if(n>=20) break;

cout<<"sum="<<sum<<endl;

}

2.

#include <iostream>

using namespace std;

int main()

{int x;

cout<<"input x:"<<endl;

cin>>x;

if(x==0)

cout<<"0";

else

while(x!=0)

{cout<<x%10;

x=x/10;

}

system("pause");

return 0;

}

3.

#include <iostream>

using namespace std;

int main()

{int m,m1,m2,m3;

for(m=100;m<1000;m++)

{m1=m%10;

m2=m/10%10;

m3=m/100;

if(m1\*m1\*m1+m2\*m2\*m2+m3\*m3\*m3==m)

cout<<m<<"\t";

}

system("pause");

return 0;

4.

#include <iostream>

using namespace std;

int main()

{

double t(1),s(0);

int i=1;

while(1/t>=1e-4)

{

s=s+1/t;

t=t+i;

i++;

}

cout<<"s="<<s<<endl;

system("pause");

return 0;

}

5.

#include <iostream>

using namespace std;

int main()

{double pi=1,t=2;

int n;

for(n=1;t>1e-4;n++)

{pi=pi\*t;

t=(float)((2\*n)\*(2\*n))/((2\*n-1)\*(2\*n+1));

}

cout<<"pi="<<pi<<endl;

system("pause");

return 0;

}

6.

#include <iostream>

#include "time.h"

using namespace std;

int main()

{int a,n,i,k;

double s=0,temp=0;

srand(time(NULL));

a=rand()%9+1;

n=rand()%6+5;

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

{temp=temp\*10+a;

s=s+temp;

}

cout<<"s="<<s<<endl;

system("pause");

return 0;

}

7.

#include <iostream>

#include "math.h"

using namespace std;

int main()

{float a,x,x1;

cin>>a;

x=a;

do

{x1=x;

x=2.0/3\*x+a/(3\*x\*x);

}while(fabs(x-x1)>1e-5);

cout<<"编程求得x="<<x<<endl;

cout<<"调用函数求得x="<<pow(a,1.0/3)<<endl;

system("pause");

return 0;

}

8.（1）

#include <iostream>

#include "iomanip"

using namespace std;

int main()

{int i,j;

for(i=1;i<=9;i++)

{ cout<<setw(20-i);

for(j=1;j<=2\*i-1;j++)

cout<<i;

cout<<endl;

}

system("pause");

return 0;

}

8.（2）

#include <iostream>

#include "iomanip"

using namespace std;

int main()

{int i,j;

char c;

for(i=9;i>=1;i--)

{ cout<<setw(9-i)<<"";

c=9-i+'A';

for(j=1;j<=2\*i;j++)

cout<<c;

cout<<endl;

}

system("pause");

return 0;

}