#include <iostream>

#include <iostream>

#include <time.h>

#include <limits.h>

#include <math.h>

using namespace std;

int proverka\_vvod()

{ int N;

cout<<"Vvedite kolichestvo elementov massiva N="<<endl;

cin>>N;

while(N<=0||N>20)

{ cout<<"N vvedeno ne pravilno"<<endl;

cout<<"Vvedite kolichestvo elementov massiva N="<<endl;

cin>>N;

}

return(N);

}

int INT\_proverka\_2()

{int a;

do { cout<<"d=";

cin>>a;

if((a<INT\_MIN)||(a>INT\_MAX))

cout<<"Chislo ne vhodit v diapazon tipa dannyh"<<endl;

}

while(!((a<=INT\_MAX)&&(a>=INT\_MIN)));

return a;

}

void avtovvod(int A[],int kol\_el)

{ srand( (unsigned)time( NULL ) );

for (int i=0;i<kol\_el;i++)

A[i]=rand()%kol\_el;

return;

}

void vyvod(const int A[],int kol\_el)

{

cout<<"Vyvod elementov vektora\n";

for (int i=0;i<kol\_el;i++)

cout<<A[i]<<"\t";

cout<<endl;

return;

}

void vvod\_el(int A[],int kol\_el)

{ for (int i=0;i<kol\_el;i++)

{ cout<<"Vvidite\_"<<i<<"\_element:";

cin>>A[i];}

return;

}

double summa (int A[],int x,int y,int kol\_el)

{ double S = 0;

for(int i=0;i<kol\_el;i++)

{

if(A[i]>=x\*y)

{

S=S+A[i]\*A[i]\*A[i];

}

}

return (S);

}

int INT\_proverka()

{ int a;

do {cout<<"Vvedite konci otrezka c,d,na kotorom nuzno nahodit summu c="<<endl;

cin>>a;

if((a<INT\_MIN)||(a>INT\_MAX))

cout<<"Chislo ne vhodit v diapazon tipa dannyh"<<endl;

}

while(!((a<=INT\_MAX)&&(a>=INT\_MIN)));

return (a);

}

int main ()

{ int n;

int c,d,B[20];

double S;

char v,g;

do { n=proverka\_vvod();

c=INT\_proverka();

d=INT\_proverka\_2();

cout<<"Esli hotite chtob elementy massiva vvelis avtomaticheski,"<<endl;

cout<<"to vvedite a, esli hotite vvesti sami, vvedite druguu bukvu"<<endl;

cin>>v;

if(v=='a')

avtovvod(B,n);

else

vvod\_el(B,n);

vyvod(B,n);

S=summa(B,c,d,n);

cout<<"Summa elementov S="<<S<<endl;

cout<<"Hotite viity iz programmy? Yesly da, vvedite Y"<<endl;

cin>>g;}

while(!(g=='y'||g=='Y'));

return 0;

}