

~\OneDrive\Desktop\p1.c++

```
1  #include<iostream>
2  #include <iomanip>
3  #include<cmath>
4  using namespace std;
5  int main()
6  {
7  //1
8  char name[15];
9  int age;
10 cout<<"enter your name:"<<endl;
11 cin>>name;
12 cout<<"enter your age:"<<endl;
13 cin>>age;
14 cout<<"hello "<<name<<" , you are "<<age<<" years old"<<endl;
15 //2
16 int a,b;
17 cout<<"enter 2 numbers:"<<endl;
18 cin>>a>>b;
19 cout<<"sum is:"<<a+b<<endl;
20 //3
21 float a,b;
22 char c;
23 cout<<"enter 2 numbers:"<<endl;
24 cin>>a>>b;
25 cout<<"enter your choice:"<<endl;
26 cin>>c;
27 cout << fixed << setprecision(2);
28 switch(c){
29     case '+':cout<<a+b;
30     break;
31     case '-':cout<<a-b;
32     break;
33     case '*':cout<<a*b;
34     break;
35     case '/':cout<<(a/b);
36     break;
37     default:cout<<"invalid choice";
38     break;
39 }
40 cout << fixed << setprecision(2);
41 float a,b;
42 cout<<"enter 2 nums:"<<endl;
43 cin>>a>>b;
44 cout<<a/b<<endl;
45 int ci,p,r,n,t;
46 cin>>p>>r>>n>>t;
47 ci=pow((1+(r/n)),n*t);
48 cout<<ci<<endl;
```

```
49 //6
50 int l,b;
51 cout<<"enter the length and width of rectangle"<<endl;
52 cin>>l>>b;
53 cout<<"area:"<<l*b<<" perimeter:"<<2*(l+b)<<endl;
54 //7
55 int a,b,c;
56 cout<<"provide 2 num:"<<endl;
57 cin>>a>>b;
58 c=b;
59 b=a;
60 a=c;
61 cout<<"a="<<a<<"b="<<b<<endl;
62 a=a+b;
63 b=a-b;
64 a=a-b;
65 cout<<"a="<<a<<"b="<<b<<endl;
66 //8
67 char fn[10],ln[10];
68 cout<<"enter your full name:"<<endl;
69 cin>>fn>>ln;
70 cout<<"thankyou "<<fn<<ln<<" for staying in our hotel"<<endl;
71 //9
72 char ch;int n;float a;
73 cout<<"enter integer:"<<endl;
74 cin>>n;
75 cout<<"enter character:"<<endl;
76 cin>>ch;
77 cout<<"floating number:"<<endl;
78 cin>>a;
79 cout<<"character |"<<"integer |"<<"floating number |"<<endl;
80 cout<<ch<<"|"<<n<<"|"<<a<<endl;
81 //11
82 int a,r,c=0;
83 cout<<"enter a number:"<<endl;
84 cin>>a;
85 while(a!=1){
86     r=a%2;
87     a=a/2;
88     if(r==1){
89         c++;
90     }
91 }
92 cout<<c<<endl;
93 //12
94 int a,b,c;
95 cout<<"enter values of a,b and c with respect to the equation ax^2+bx+c:"<<endl;
96 cin>>a>>b>>c;
97 int r=pow(b,2)-4*a*c;
98 if(r>0){
```

```
99     cout<<"the roots are real and unequal"<<endl;
100     cout<<"roots are:"<<endl;
101     cout<<((-b)+pow(r,0.5))/a<<"\n"<<((-b)-pow(r,0.5))/a<<endl;
102 }
103 else if(r==0){
104     cout<<"the roots are real and equal"<<endl;
105     cout<<"roots are:"<<endl;
106     cout<<((-b)+pow(r,0.5))/a<<"\n"<<((-b)-pow(r,0.5))/a<<endl;
107 }
108 else{
109     cout<<"the roots are imaginary"<<endl;
110 }
111 //ATM
112 int choice,balance,b,label_1;
113 label_1:
114 cout<<"choice (1):withdrawal\nchoice (2):deposit\nchoice (3):balance inquiry\nchoice (4):exit"
<<endl;
115 cout<<"enter balance and choice:"<<endl;
116 return;
117 cin>>balance>>choice;
118 switch (choice){
119     case 1:cout<<"enter amount for withdrawal:"<<endl;
120     cin>>b;
121     cout<<"ammount successfully withdrawn"<<endl;
122     if(balance>b)
123     {
124         cout<<"ammount withdrawn:"<<b<<endl;
125         balance-=b;
126         goto label_1;
127     }
128     else
129     {
130         cout<<"not sufficient balance"<<endl;
131         goto label_1;
132     }
133     break;
134     case 2:cout<<"enter amount for deposit:"<<endl;
135     cin>>b;
136     cout<<"ammount successfully deposit"<<endl;
137     cout<<"ammount deposit:"<<b<<endl;
138     balance+=b;
139     goto label_1;
140     break;
141     case 3:cout<<"balance:"<<balance<<endl;
142     goto label_1;
143     break;
144     case 4:exit(0);
145     default:cout<<"invalid choice"<<endl;
146     goto label_1;
147     break;
```

```
148 }
149 //14
150 int a,b,c;
151 cout<<"enter 3 sides of triangle:"<<endl;
152 cin>>a>>b>>c;
153 if(a<b+c||b<a+c||c<b+a){
154     if(a==b&&b==c&&c==a){
155         cout<<"equilateral triangle"<<endl;
156     }
157     else if(a!=b&&b!=c&&c!=a){
158         cout<<"scaler triangle"<<endl;
159     }
160     else{
161         cout<<"isoceles triangle"<<endl;
162     }
163 }
164 else{
165     cout<<"not a triangle"<<endl;
166 }
167 //15
168 int a,b,c,d;
169 cout<<"provide 4 numbers:"<<endl;
170 cin>>a>>b>>c>>d;
171 cout<<"result is "<<(a^b)+(c&d)<<endl;
172
173
174 }
175
```