Scientific calculator Source Code By Arun Prabhakar

```
#include <iostream>
#include <conio.h>
#include <iomanip>
#include <math.h>

using namespace std;

int main()
{
int choice;
char continu='y';
cout << "\nHello User!";
cout << "\n SCIENTIFIC CALCULATOR! "; while (continu!='n'){
cout <<"\nPress 1 for addition";
cout <<"\nPress 2 for Subtraction";
cout <<"\nPress 3 for Multiplication";
cout <<"\nPress 4 for Division";
cout <<"\nPress 5 for Absolute Value";
cout <<"\nPress 6 for Exponential Multiplication"; cout <<"\nPress 7 for square root";
cout <<"\nPress 8 for sine";
cout <<"\nPress 9 for cosine";
cout <<"\nPress 10 for tangent";
cout <<"\nPress 11 for cosecant";
cout <<"\nPress 12 for secant";
cout <<"\nPress 13 for cotangent";
cout <<"\nPress 14 for log(base e)";
cout <<"\nPress 15 for log(base 10)";
cout <<"\nEnter Your Choice:";
cin>>choice;
switch(choice) {
case 1 :
{
char response='y';
while (response!='n'){
float x,y;
cout<<"\nEnter 1st no:";
cin>>x;
cout<<"\nEnter 2nd no:";
cin>>y;
cout<<"\nsum="<<x+y;
cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more Additions?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 2 :
{
char response='y';
while (response!='n'){
float x,y;
cout<<"\nEnter 1st no:";
cin>>x;
cout<<"\nEnter 2nd no:";
cin>>y;
cout<<"\nDifference="<<x-y;
cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more Subtraction?[y/n]"; cin>>response; if
(response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 3 :
{
char response='y';
while (response!='n'){
float x,y;
cout<<"\nEnter 1st no:";
cin>>x;
```

```
cout<<"\nEnter 2nd no:";
cin>>y;
cout<<"\nProduct="<<x*y;
cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more Multiplication?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 4 :
{
char response='y';
while (response!='n'){
int x,y;
cout<<"\nEnter Dividend:";
cin>>x;
cout<<"\nEnter Divisor:";
cin>>y;
cout<<"\nQuotient="<<(x/y)<<" Remainder="<<(x%y); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more Division?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 5 :
{
char response='y';
while (response!='n'){
double x;
cout<<"\nEnter the decimal no:";
cin>>x;
cout<<"\nAbsolute value="<<fabs(x); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more like these?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 6 :
{
char response='y';
while (response!='n'){
double x,y;
cout<<"\nEnter base no:";
cin>>x;
cout<<"\nEnter exponent:"; cin>>y;
cout<<"\nResult="<<pow(x,y);
cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more Exponential Multiplications?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 7 :
{
char response='y';
while (response!='n'){
double x;
cout<<"\nEnter the no:";
cin>>x;
cout<<"\nSquare Root="<<sqrt(x); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more Square roots?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 8 :
{
char response='y';
while (response!='n'){
double x; cout<<"\nEnter the angle(in radians):"; cin>>x;
cout<<"\nRequired Sine Value="<<sin(x); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more like these?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
```

```
break;}
case 9 :
{
char response='y';
while (response!='n'){
double x;
cout<<"\nEnter the angle(in radians):"; cin>>x;
cout<<"\nRequired Cosine Value="<<cos(x); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more like these?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 10 :
{
char response='y';
while (response!='n'){
double x;
cout<<"\nEnter the angle(in radians):"; cin>>x;
cout<<"\nRequired Tangent Value="<<tan(x); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more like these?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 11 :
{
char response='y';
while (response!='n'){
double x;
cout<<"\nEnter the angle(in radians):"; cin>>x;
cout<<"\nApprox Cosecant Value="<<1/(sin(x)); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more like these?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 12 :
{
char response='y'; while (response!='n'){
double x;
cout<<"\nEnter the angle(in radians):"; cin>>x;
cout<<"\nApprox secant Value="<<1/(cos(x)); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more like these?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 13 :
{
char response='y';
while (response!='n'){
double x;
cout<<"\nEnter the angle(in radians):"; cin>>x;
cout<<"\nApprox Cotangent Value="<<1/(tan(x)); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more like these?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 14 :
{
char response='y';
while (response!='n'){
double x;
cout<<"\nEnter the no.:";
cin>>x;
cout<<"\nNatural Logarithm="<<log(x); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more Log values?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
case 15 :
{
```

```
char response='y';
while (response!='n'){
double x;
cout<<"\nEnter the no.:";
cin>>x;
cout<<"\nLogarithm to base 10="<<log10(x); cout<<"\nPress enter to continue";
getch();
cout<<"\nDo you want more Log values?[y/n]"; cin>>response;
if (response=='y'){cout<<"\nlets start again";} else{break;}}
break;}
default:
{ cout<<"\nInvalid Value";
break;
}
}
cout<<"\nDo you want to use other Calculations?[y/n]"; cin>>continu;
if (continu=='y'){cout<<"\nLets start again";} else{cout<<"\n USE ME WHEN YOU NEED\n";
break;
getch();}
}
return 0;
}
```