

```
//SYARIFAH DANIA BINTI SYED ABU BAKAR
```

```
//A23CS0183
```

```
#include <iostream>
```

```
#include <cmath>
```

```
using namespace std;
```

```
int main ()
```

```
{
```

```
    // A(1,3), B(2,6), C(5,4)
```

```
    int x1 = 1, y1 = 3, x2 = 2, y2 = 6, x3 = 5, y3 = 4;
```

```
    // display points
```

```
    cout << "A(1,3), B(2,6), and C(5,4)" << endl;
```

```
    string points[4] = {
```

```
        "  x  y",
```

```
        "A  1  3",
```

```
        "B  2  6",
```

```
        "C  5  4"
```

```
    };
```

```
    for (int i= 0; i < 4; i++)
```

```
    {
```

```
        cout << points[i]<<endl;
```

```
        cout << endl;
```

```
}
```

```
// finding distance using Euclidean Distance Formula
```

```
double ab = sqrt(pow(x2-x1,2)+pow(y2-y1,2));
```

```
double ac = sqrt(pow(x3-x1,2)+pow(y3-y1,2));
```

```
double bc = sqrt(pow(x3-x2,2)+pow(y3-y2,2));
```

```
cout <<"AB = " <<ab<< endl;
```

```
cout <<"AC = " <<ac<< endl;
```

```
cout <<"BC = " <<bc<< endl;
```

```
return 0;
```

```
}
```

OUTPUT

```
C:\Users\ania\OneDrive\Doc × + ▾
A(1,3), B(2,6), and C(5,4)
  x  y
A   1  3
B   2  6
C   5  4

AB = 3.16228
AC = 4.12311
BC = 3.60555

-----
Process exited after 2.146 seconds with return value 0
Press any key to continue . . .
```