UTM

UNIVERSITI TEKNOLOGI MALAYSIA

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MATRIC NUMBER	A23CS0162
SECTION	03
COURSE	PROGRAMMING TECHNIQUE I
LECTURER	DR. NIES HUI WEN
TITLE	LAB EXERCISE 2

C++ CODE

```
//Nurul Asyikin Binti Khairul Anuar
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#include <iostream>
#include <cmath>
using namespace std;
double distance (int, int, int, int);
void table (int, int, int, int, int, int);
string point (int, int);

int main ()
{
   int x1=1, y1=3, x2=2, y2=6, x3=5, y3=4;
   cout << point (x1, y1) << ", " << point (x2, y2) << ", and " << point (x3, y3) << endl;

   table (x1, y1, x2, y2, x3, y3);

   cout << "AB = " << distance (x1, y1, x2, y2) << endl;
   cout << "AC = " << distance (x1, y1, x3, y3) << endl;
   cout << "BC = " << distance (x2, y2, x3, y3) << endl;
   system ("pause");
   return 0;
}

string point (int x, int y)
{
   if (x==1 && y==3)
      return "A(1, 3)";
   if (x==2 && y==6)
      return "B(2, 6)";
   if (x==5 && y==4);
      return "C(5, 4)";
}

void table (int a, int b, int c, int d, int e, int f)
{
   string alp [] = {"A", "B", "C"};
   int point [] = {a, b, c, d, e, f};
   cout << " \tx\ty" << endl;
   for (int i= 0; i<3; i++)
   {
      cout << alp [i] << "\t";
      cout << point [i*2] << "\t" << point [i*2+1] << endl;
   }
}

double distance (int a1, int b1, int a2, int b2)
{
   double distance = sqrt(pow((a2-a1),2) + pow((b2-b1),2));
   return distance;
}
```

SCREEN OUTPUT