

Developing Software: Introduction

(H173 34)

Walkthru exercise 1

“Write a program in C++ that will read in a whole number and output the square of the number”

A source code solution:

// Edna

// 6th September, 201?

// The square of a number using input - output - process functions

// Saved as Walk1Av1.cpp

#include <iostream.h>

#include <conio.h> // for clrscr() and the simple input function getch()

int number\_to\_square,square\_of\_number;

void get\_number()

{

cout << "Enter number to be squared" << endl; // 'endl' adds a new line

cin >> number\_to\_square;

}

void calculate\_square()

{

square\_of\_number = number\_to\_square \* number\_to\_square;

}

void display\_result()

{

cout << "\nThe result is " << square\_of\_number << endl;

}

void main()

{

clrscr();

get\_number();

calculate\_square();

display\_result();

getch();

}

Another source code solution:

// Edna

// 7th September, 201?

// Square a number function, passing parameters

// Saved as Walk1Bv1.cpp

#include <iostream.h>

#include <conio.h> // for clrscr() and simple I/O getch()

void calculate\_and\_display\_square(int x)

{

int square\_of\_number;

square\_of\_number = x \* x;

cout << "\nThe result is " << square\_of\_number << "\n";

}

void get\_number()

{

int number\_to\_square;

cout << "Enter number to be squared" << endl;

cin >> number\_to\_square;

calculate\_and\_display\_square(number\_to\_square);

}

int main()

{

clrscr();

get\_number();

getch();

return 0;

}