

## **UNIT 4     ANALYSING VISUAL BASIC DATA**

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### **1.0    INTRODUCTION**

Here, you should learn more about the Code window, and practise your programming skills on declaration of data, use of variables of different data types, and the use of operators.

### **2.0    OBJECTIVE**

At the end of this unit you should be able to:

- operate in the code window.

### **3.0    MAIN CONTENT**

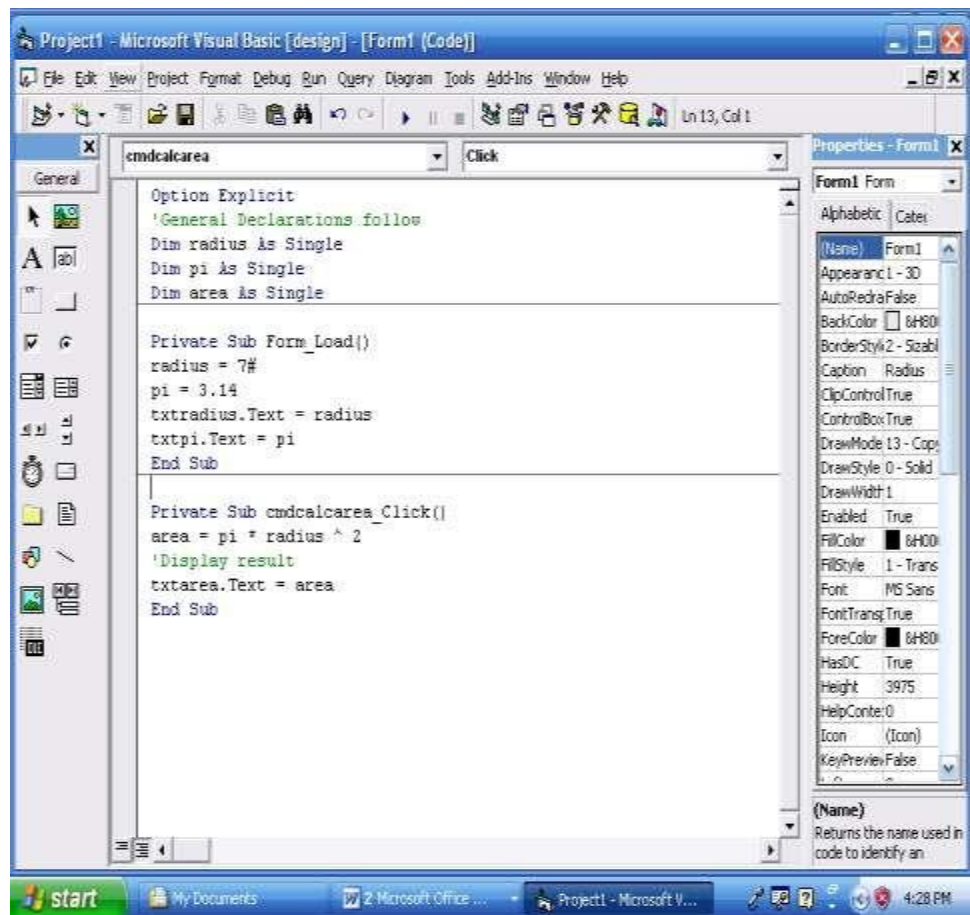
#### **3.1    Analysing Visual Basic Data**

##### **Working inside the Code Window**

The Code window contains several sections which include:

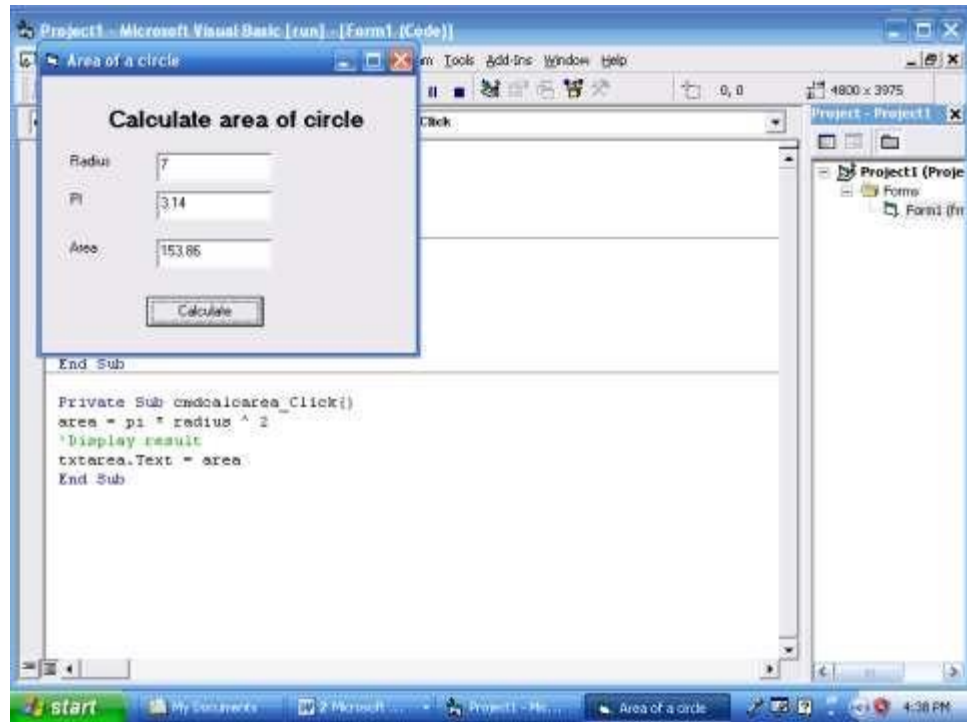
- The declarations section
- General-purpose procedures
- Event procedures

Figure 15.1 shows the declarations sections in the first set of codes. After the first wrapper line, there is an event procedure, followed by another one. General-purpose procedures can be meant to perform any kind of function like computing some data, while event procedures will be executed after the clicking of a mouse once or twice, the loading of a form, or any other event.



**Fig.37**

The output of the code displayed in Figure 37 is shown in Figure 38.



**Fig.38**

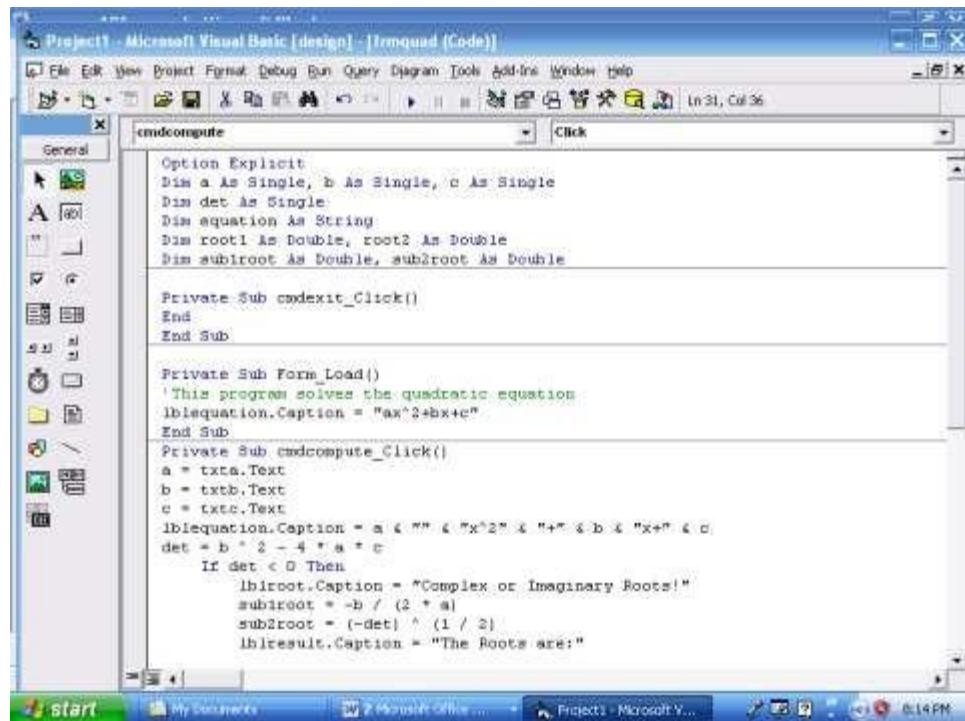
More of use of variables, together with the control of programs with conditional operators, logical operators and FOR DO loops, are described in the Exercises below:

### **SELF-ASSESSMENT EXERCISE 1**

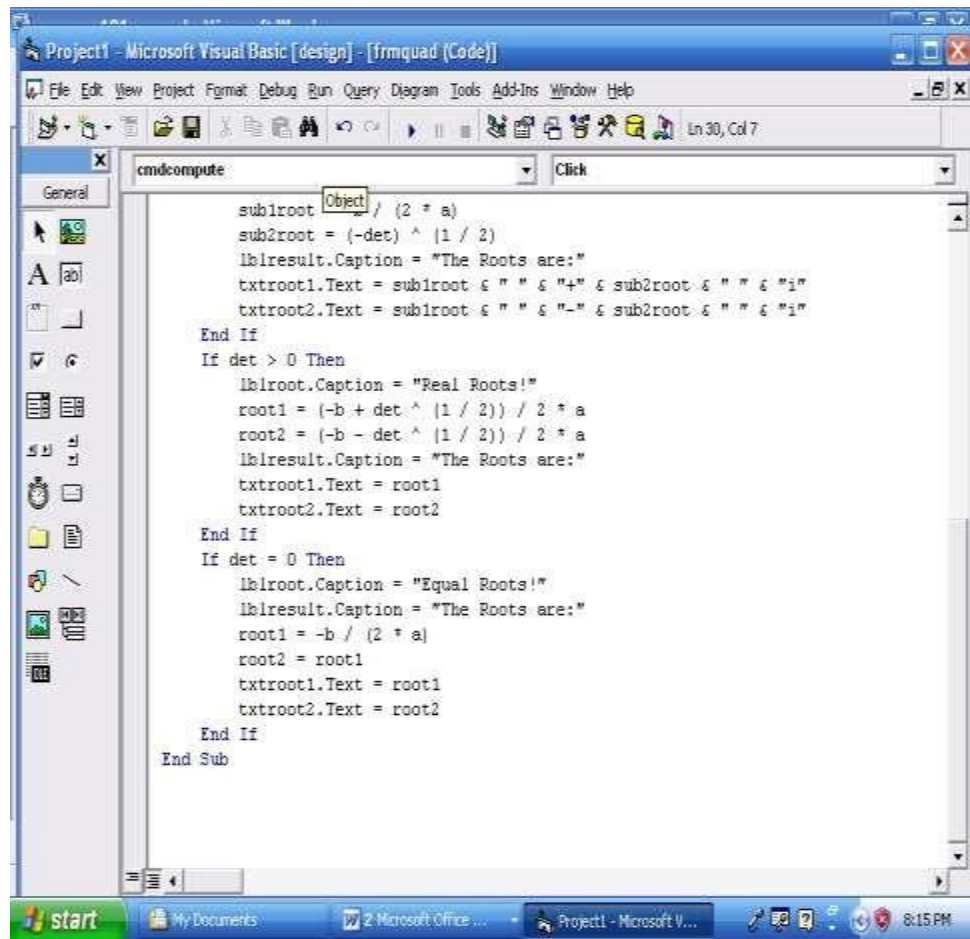
Write and run a Visual Basic Program to solve the Quadratic Equation Problem,  $ax^2+bx+c$ .

#### **Solution**

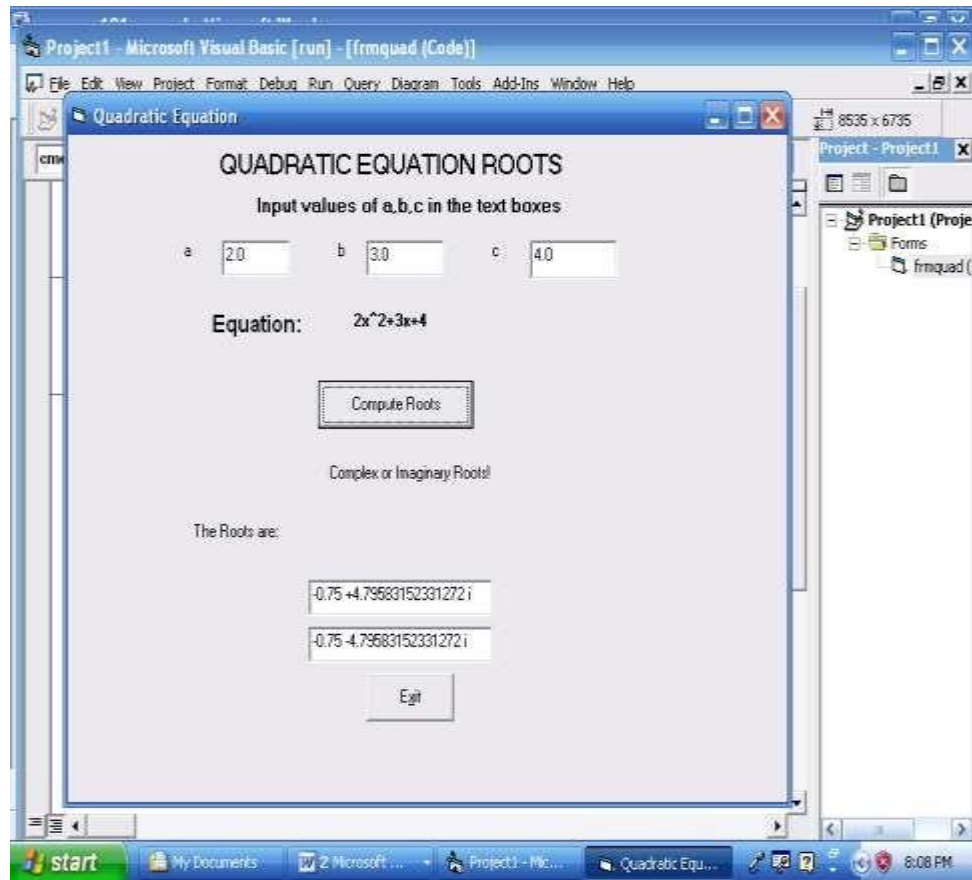
The code that provides the solution to the problem using the IF-THEN statement, is shown in Figures 39 and 40. This contains statements explaining most of the basic concepts a beginning VB Programmer needs to know. The output of the program is displayed in Figure 41. As can be seen, key words are in blue, comments are in green, while the other codes are in black.



**Fig.39**

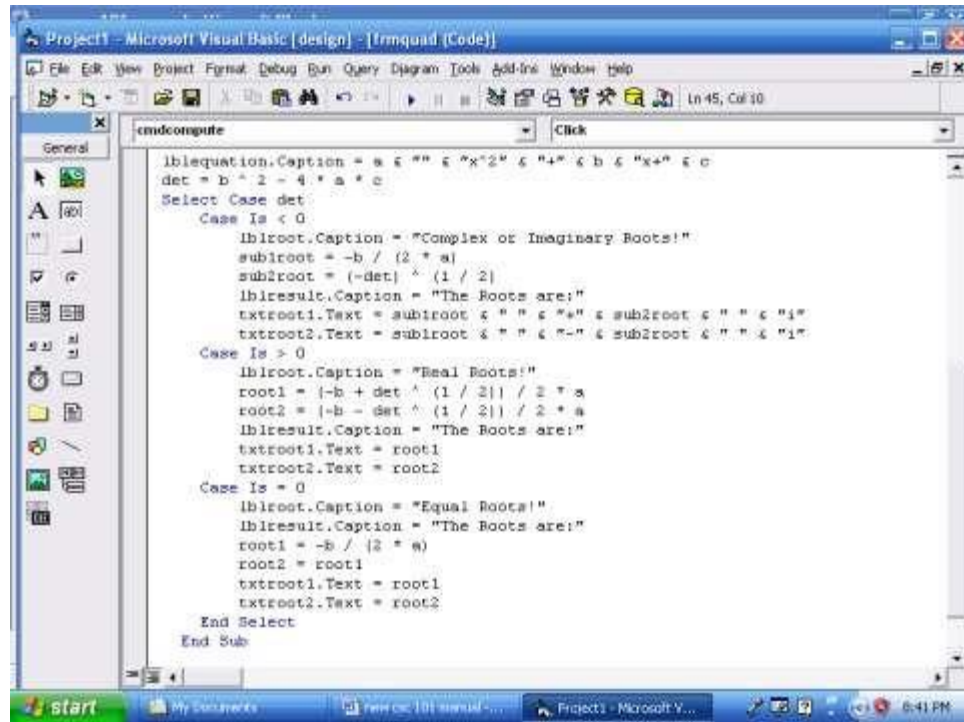


**Fig.40**



**Fig.41**

Solving the same problem using SELECT CASE statement, we have the codes displayed in Figure 42.



**Fig.42**

## SELF-ASSESSMENT EXERCISE 2

Write and Run a Visual Basic Payroll Program for 10 employees of a company. The Gross pay sums the Basic pay, Housing allowance and Professional allowance (where applicable). Workers' Grade levels range from 1 to 16. Housing allowance of workers is 30% of Basic pay for workers on levels 8-16 and 40% for levels 1-7 workers. Transport allowance is 20% of Basic pay for all workers. Hazard allowance is 15% of Basic pay for only levels 8-16 workers. The Net pay, which is the take home pay, is the Gross pay – Tax (10% of Gross pay). Design a form through which each worker's data can be entered (to look like the one displayed in Figure 43).

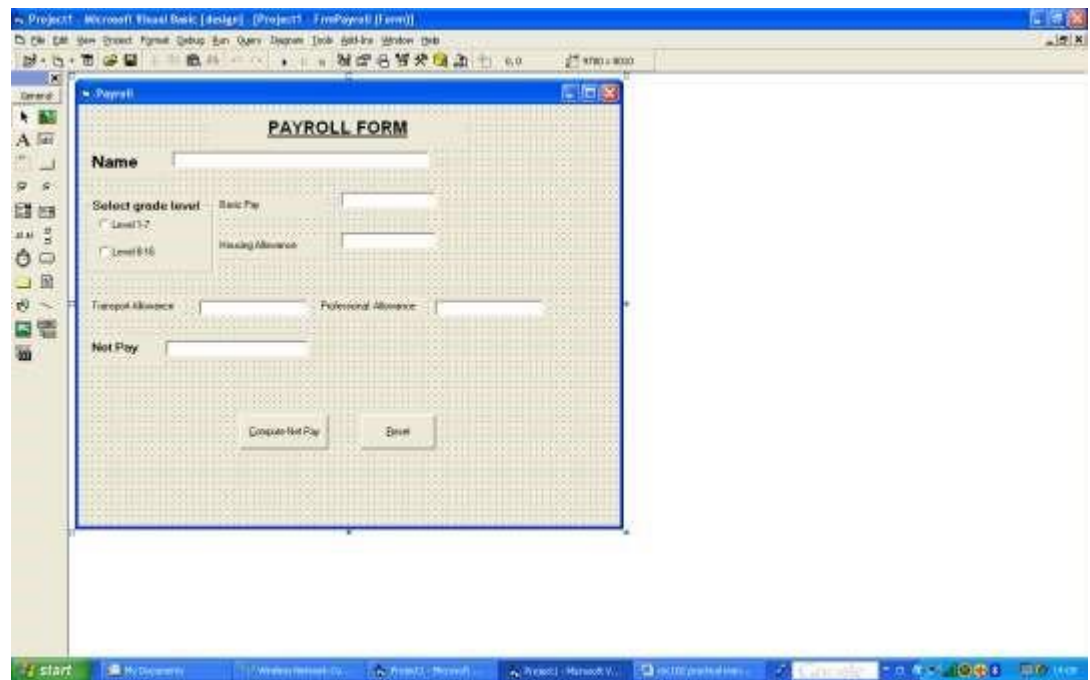
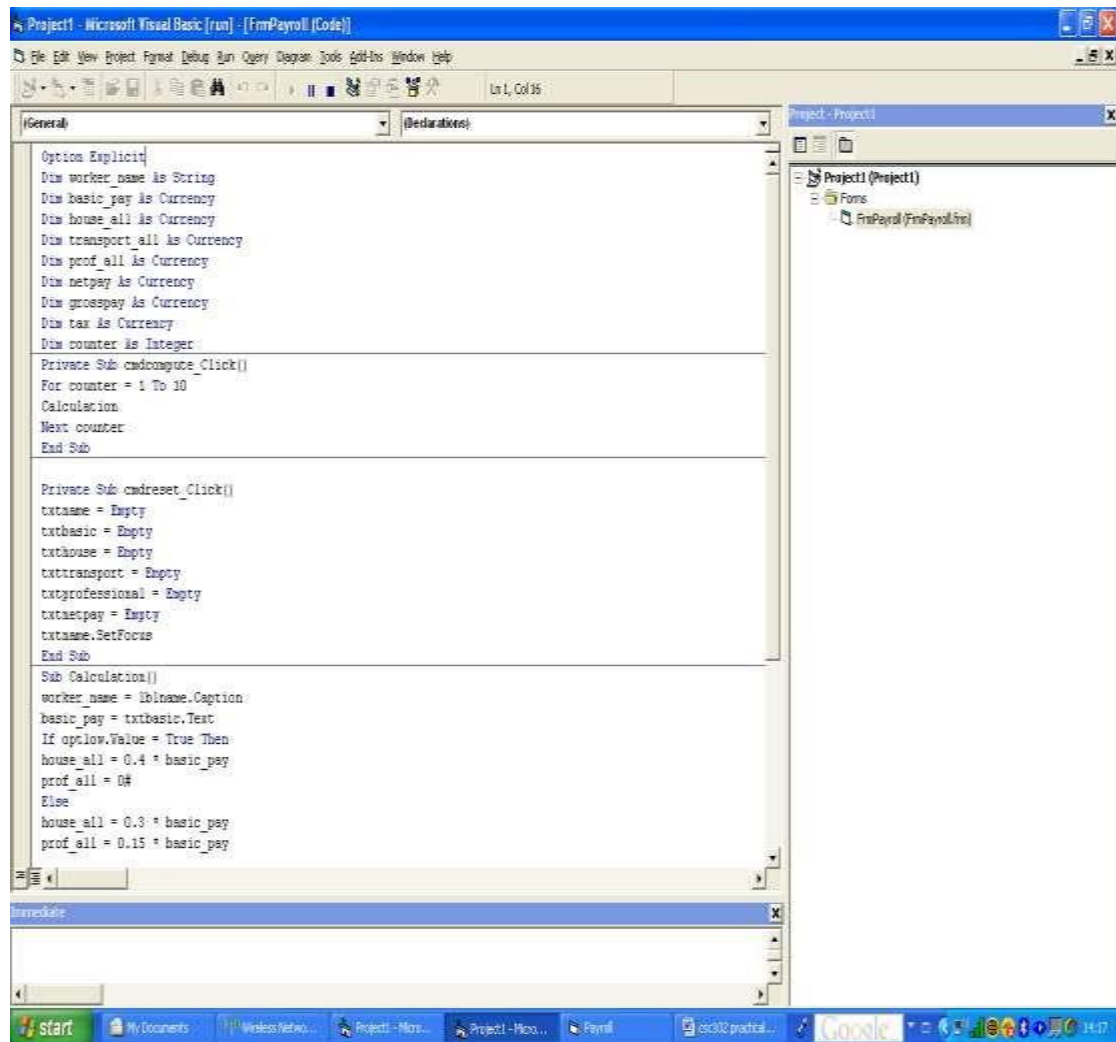
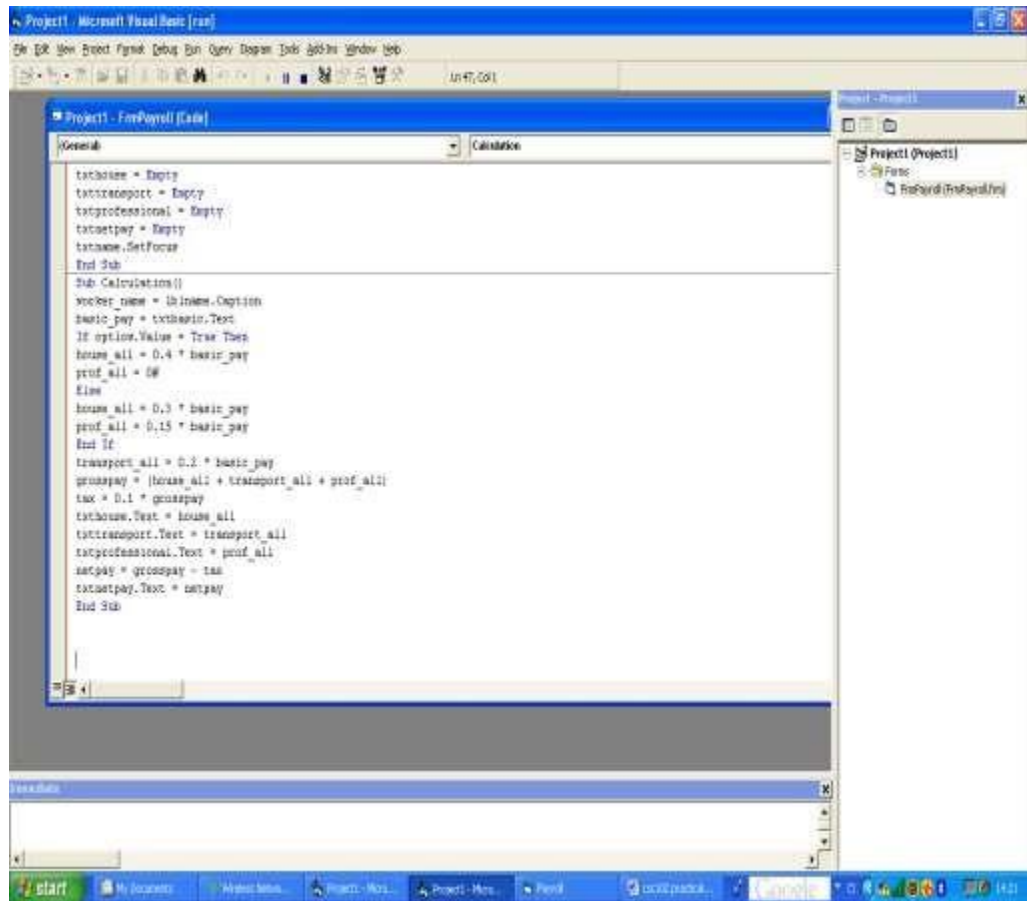


Fig.43





**Fig.44**



**Fig.45**

## 4.0 CONCLUSION

The Code window is very important to visual basic programming. The ability to write good programs depends to a large extent on its mastery.

## 5.0 SUMMARY

In this unit we have learnt how to program in the code window.

## 6.0 TUTOR-MARKED ASSIGNMENT

Using the code window, write a program to display the current time.

## **7.0 REFERENCES/FURTHER READING**

Akinyokun, O.C. (1999). *Principles and Practice of Computing Technology*. Ibadan: International Publishers Limited.

Balogun, V.F., Daramola, O.A. Obe, O.O. Ojokoh, B.A., and Oluwadare S.A.. (2006). *Introduction to Computing: A Practical Approach*. Akure: Tom- Ray Publications.

Francis Scheid (1983). *Schaum's Outline Series: Computers and Programming*. Singapore: McGraw-Hill Book Company.