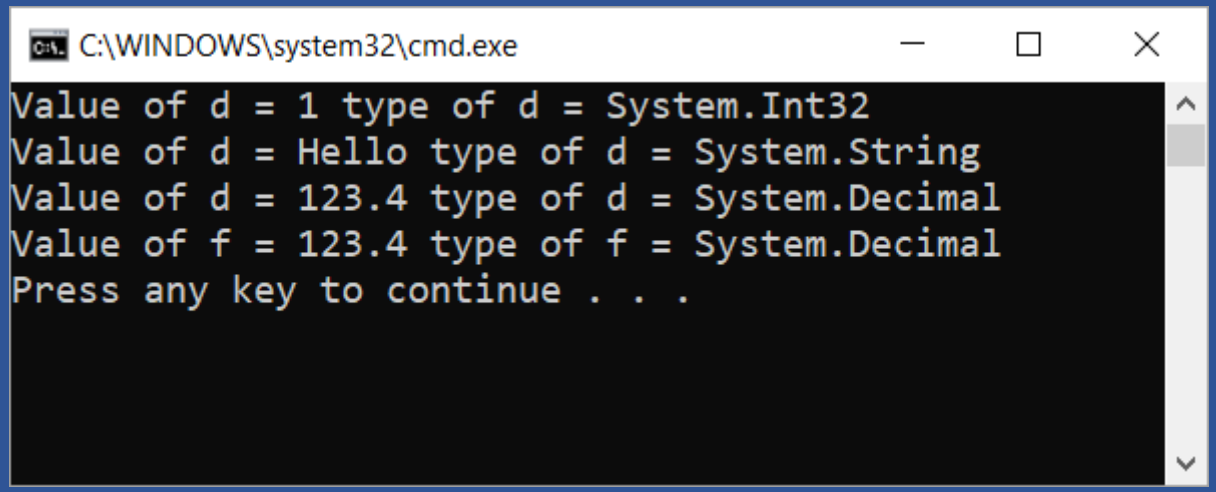
Dynamic

Dynamic type

- Introduced in C# 4
- Is a static type that bypasses type checking
- Function like type “Object”
- Support any operation form COM API, IronPython

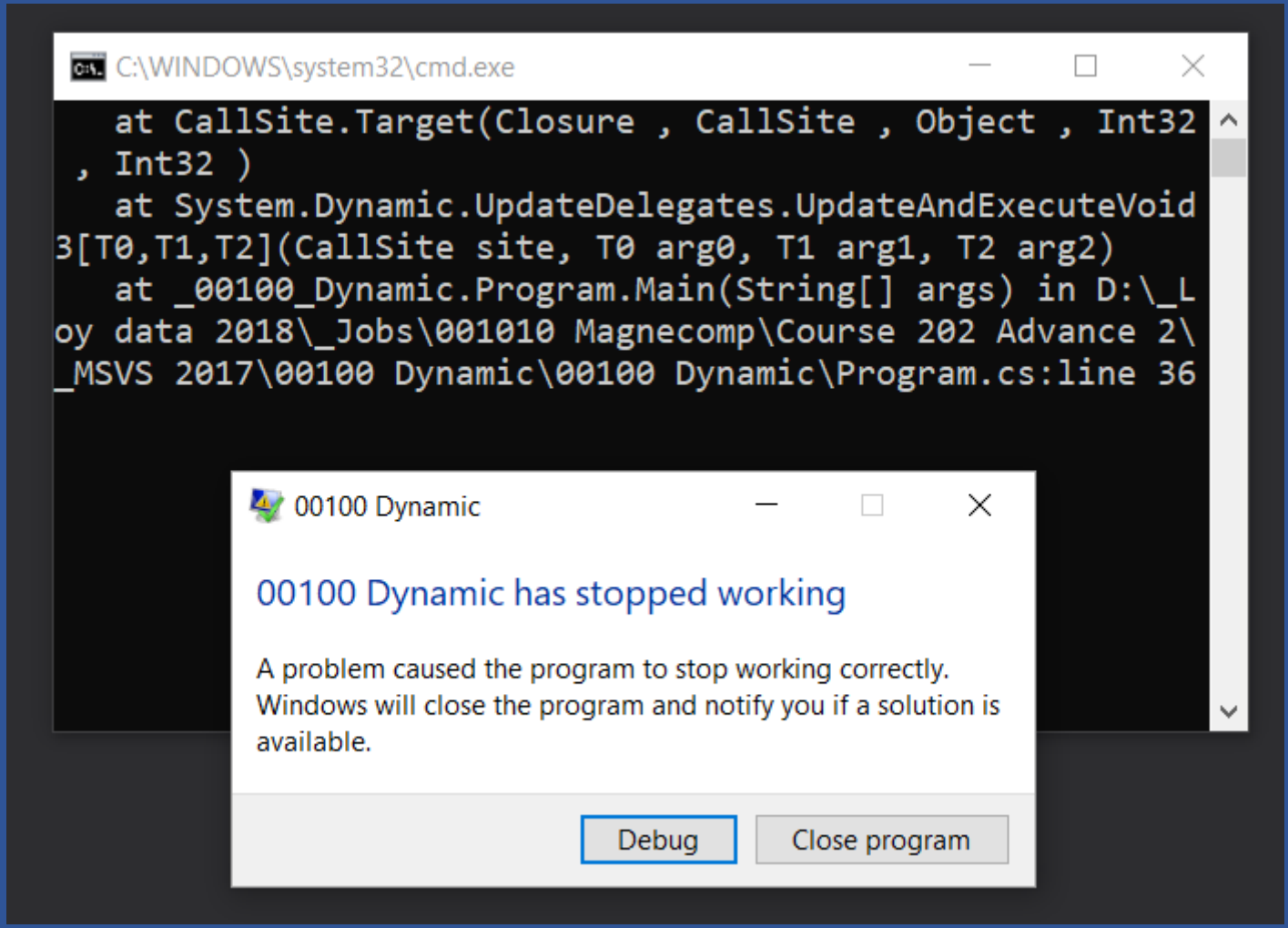
Exercise 00010 : Simple example

```
dynamic d = 1;
Console.WriteLine($"Value of d = {d} type of d = {d.GetType()}");
d = "Hello";
Console.WriteLine($"Value of d = {d} type of d = {d.GetType()}");
d = 123.4m;
Console.WriteLine($"Value of d = {d} type of d = {d.GetType()}");
int i = 0;
var f = d + i;
Console.WriteLine($"Value of f = {d} type of f = {d.GetType()}");
```



Exercise 00100 : Dynamic support any operation.

Line 36 causes no compile error (exampleMethod1 has only one param)



Exercise 00110 : Dynamic and COM interop

- need Nuget Microsoft.Office.Interop.Excel
- and excel file person001.xlsx

```
// Get fully qualified path for xlsx file
var spreadsheetLocation = @"d:\temp\person001.xlsx";
var exApp = new Excel.Application();
var exWbk = exApp.Workbooks.Open(spreadsheetLocation);
var exWks = (Excel.Worksheet)exWbk.Sheets["Sheet1"];
Excel.Range xlRange = exWks.UsedRange;
```