

# 流程控制

# 11-1 認識流程控制

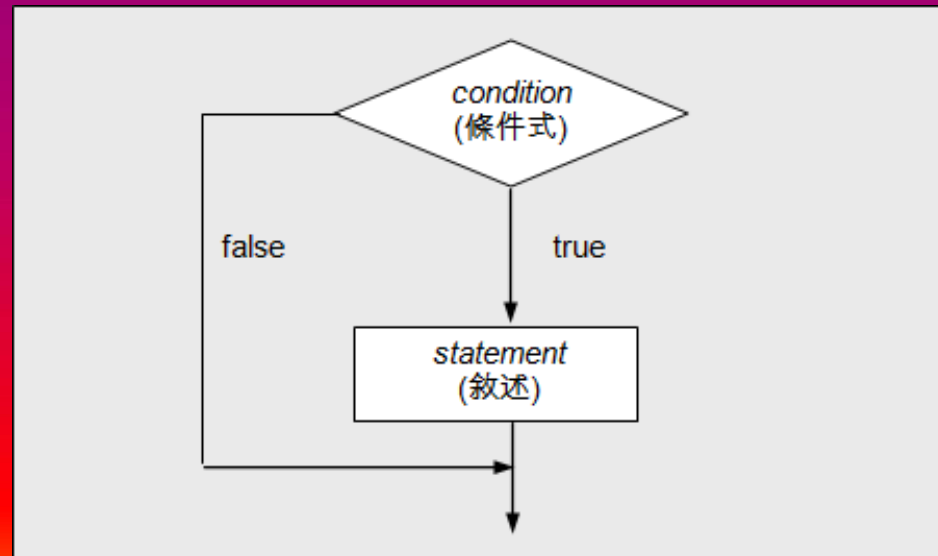
- 判斷結構
  - if...else
  - switch
- 迴圈結構
  - for
  - while
  - do

# 11-2 if...else

11-2-1 if... : 如果...就...(單向選擇)

*if (condition) statement;*

```
if (condition)  
{  
  statement1;  
  statement2;  
  ...  
  statementN;  
}
```



# 隨堂練習

- \Ch11\Prac11-1.htm

```
<html>
```

```
<head>
```

```
<title>流程控制範例</title>
```

```
<script language="javascript">
```

```
var X = prompt("請輸入0-100的數字", "");
```

```
if (X >= 60) alert("及格!");
```

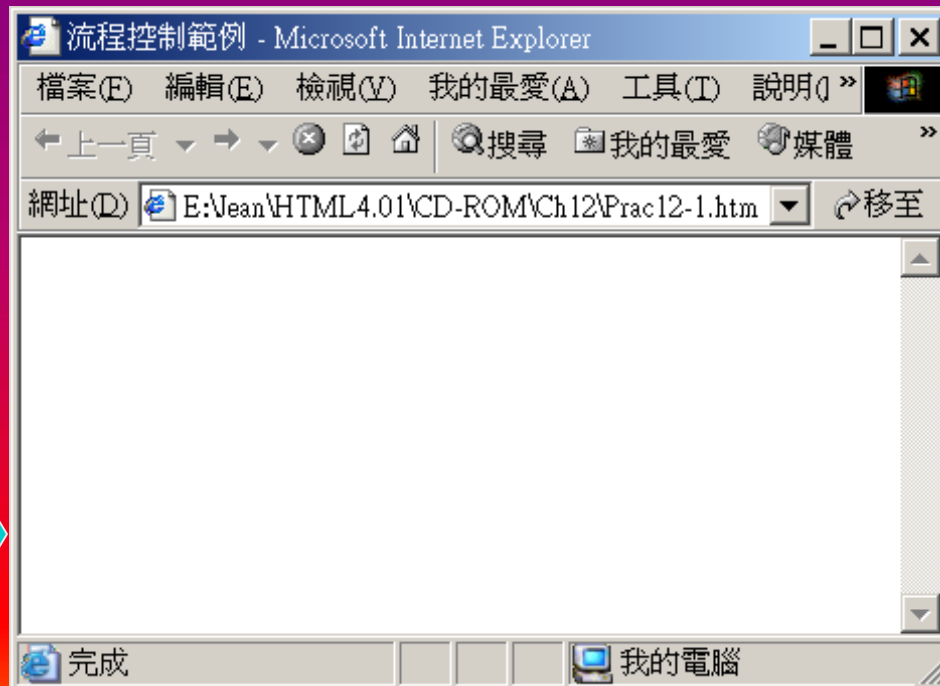
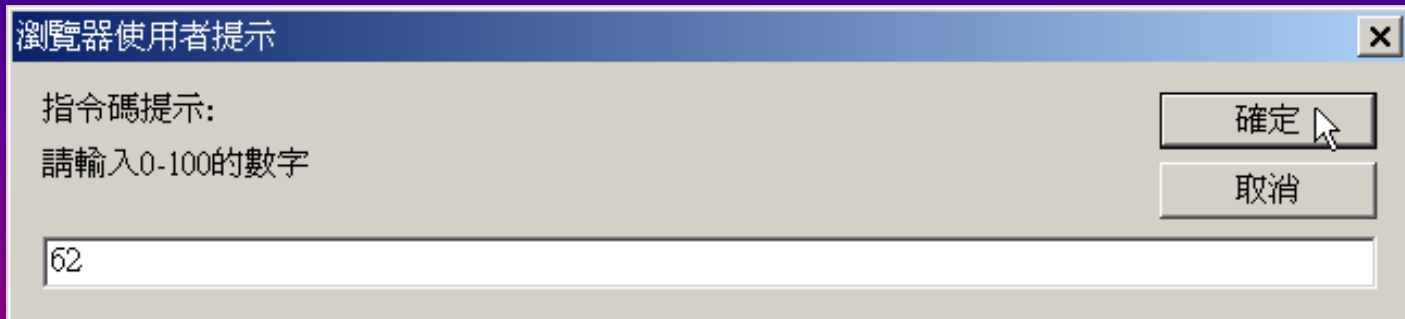
```
</script>
```

```
</head>
```

```
<body>
```

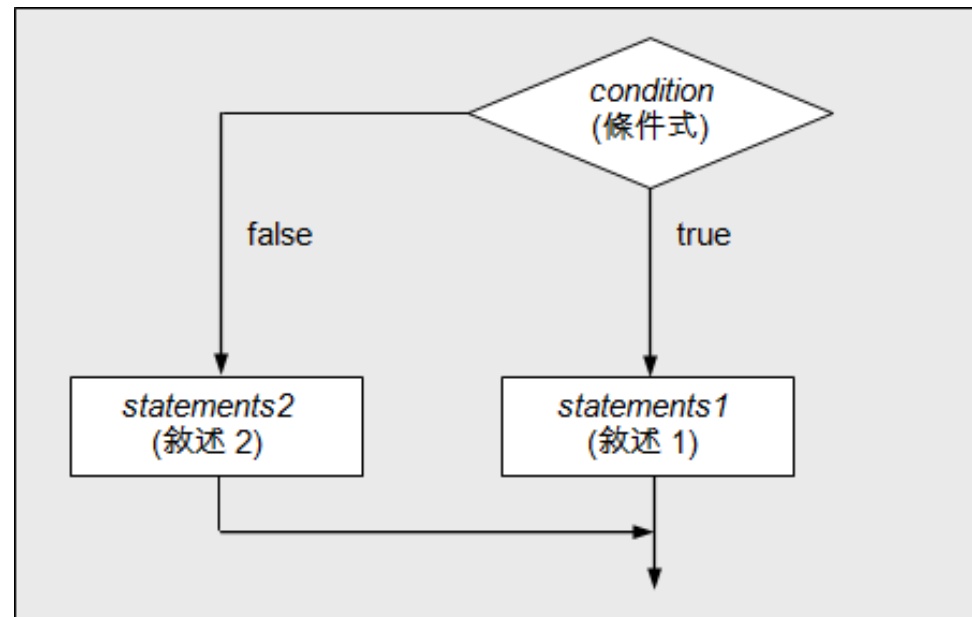
```
</body>
```

```
</html>
```



## 11-2-2 if...else : 如果...就否則... (雙向選擇)

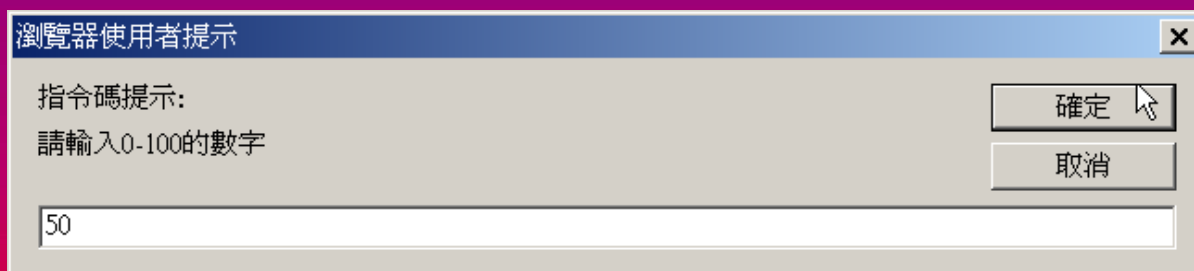
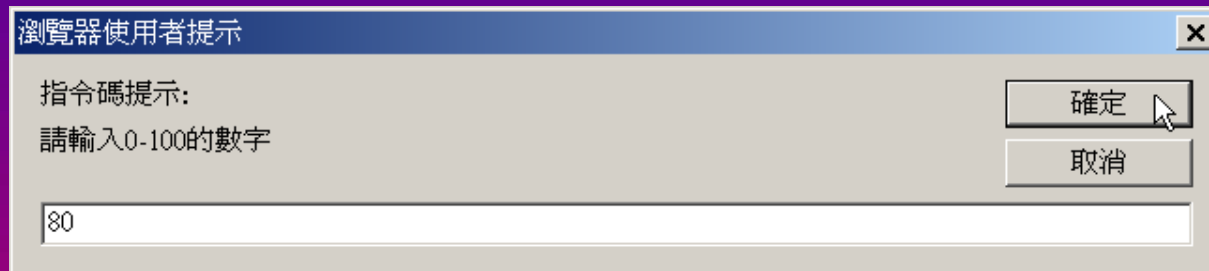
```
if (condition)  
{  
  statements1;  
}  
else  
{  
  statements2;  
}
```



# 隨堂練習

- 取自 \Ch11\Prac11-2.htm

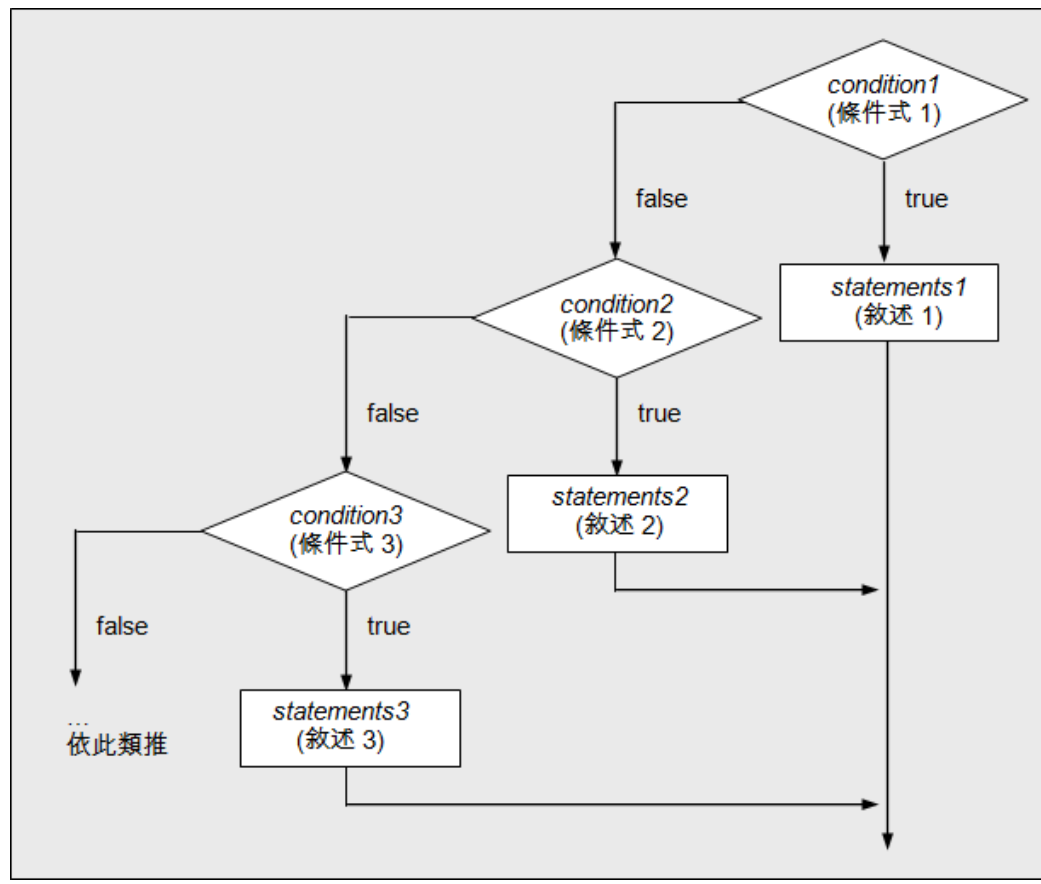
```
<script language="javascript">  
  var X = prompt("請輸入0-100的數字", "");  
  if (X >= 60)  
    alert("及格！");  
  else  
    alert("不及格！");  
</script>
```





# 11-2-3 if...else if... : 「如果...就.... 否則 如果...就...否則...」(多向選擇)

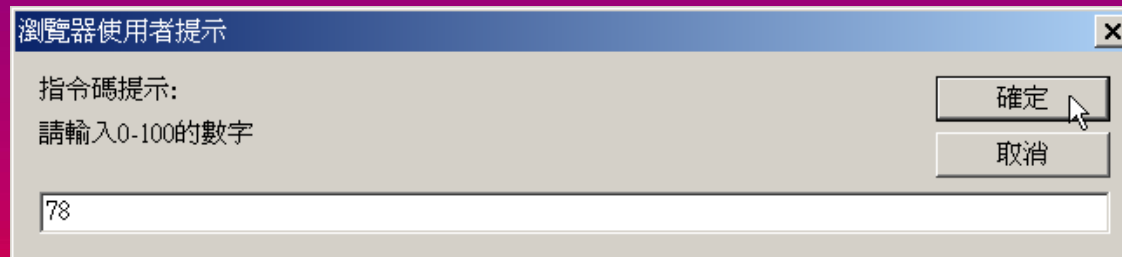
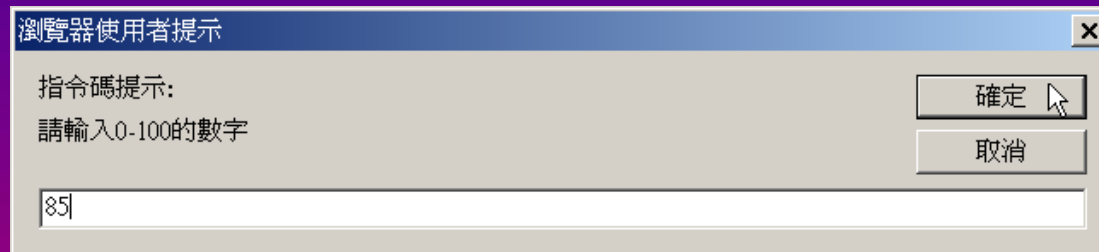
```
if (condition1)
{
  statements1;
}
else if (condition2)
{
  statements2;
}
else if (condition3)
{
  statements3;
}
...
else
{
  statementsN+1;
}
```



# 隨堂練習

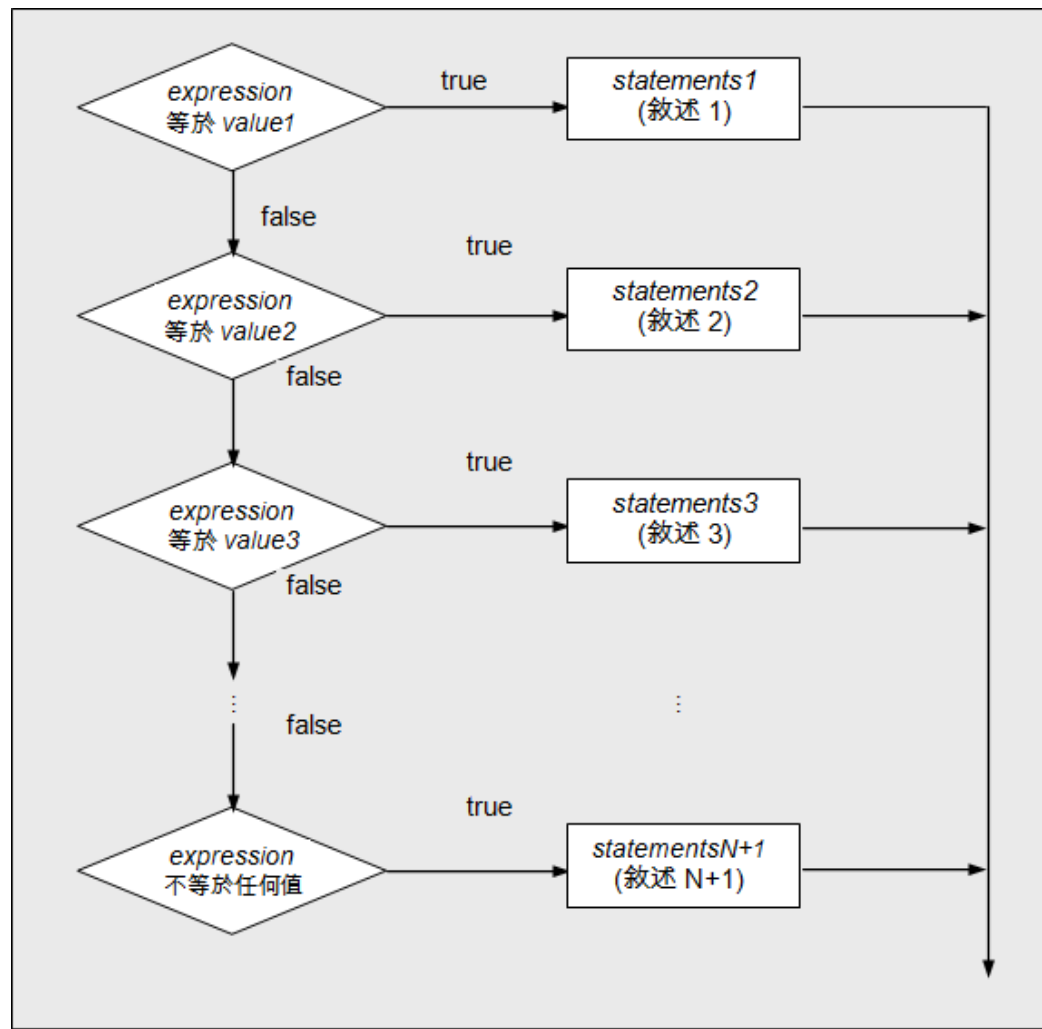
- 取自 \Ch11\Prac11-3.htm

```
<SCRIPT LANGUAGE="javascript">
var X = prompt("請輸入0-100的數字", "");
if (X >= 90)
    alert("優等！");
else if (X < 90 && X >= 80)
    alert("甲等！");
else if (X < 80 && X >= 70)
    alert("乙等！");
else if (X < 70 && X >= 60)
    alert("丙等！");
else
    alert("不及格！");
</SCRIPT>
```

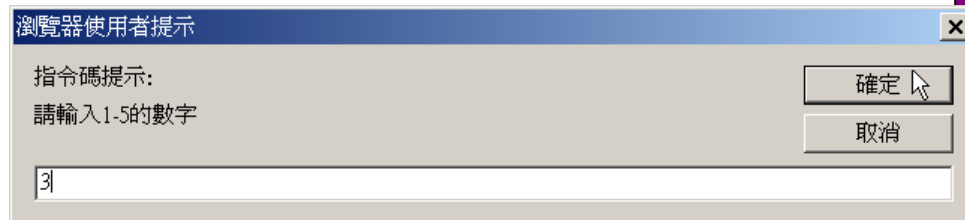


## 11-3 switch

```
switch(expression)  
{  
  case value1:  
    statements1;  
    break;  
  case value2:  
    statements2;  
    break;  
  ...  
  default:  
    statementsN+1;  
    break;  
}
```



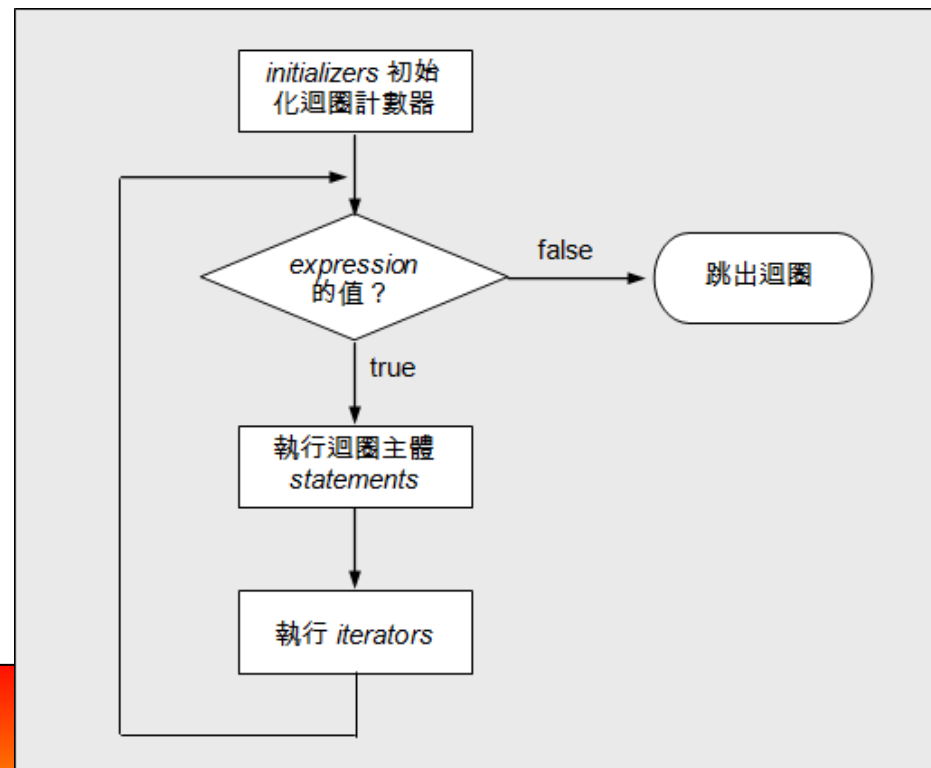
- 取自 \Ch11\Prac11-4.htm
- ```
<SCRIPT LANGUAGE="javascript">
var X = prompt("請輸入1-5的數字", "");
switch(X)
{
  case "1": //若使用者輸入1
    alert("ONE");
    break;
  case "2": //若使用者輸入2
    alert("TWO");
    break;
  case "3": //若使用者輸入3
    alert("THREE");
    break;
}
```



```
case "4": //若使用者輸入4
    alert("FOUR");
    break;
case "5": //若使用者輸入5
    alert("FIVE");
    break;
default: //若使用者輸入1-5以外的數字
    alert("您輸入的數字超過範圍!");
    break;
}
</SCRIPT>
```

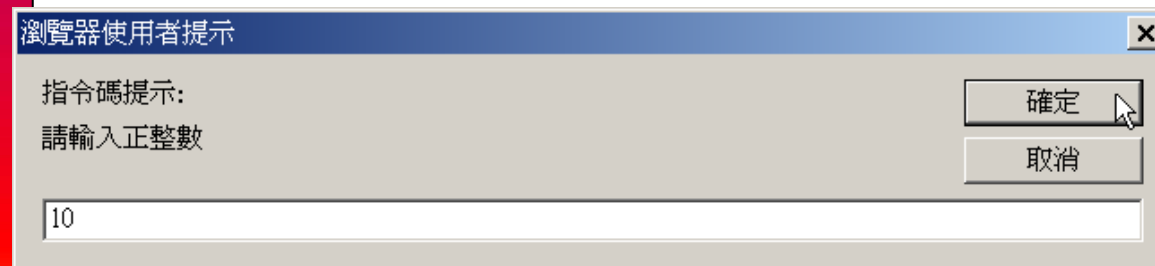
## 11-4 for (計數迴圈)

```
for (initializers; expression; iterators)  
{  
    statements;  
    [break;]  
    statements;  
}
```



- 取自 \Ch11\Prac11-6.htm

```
<SCRIPT LANGUAGE="javascript">  
var X = prompt("請輸入正整數", "");  
var Total = 0;  
for (var i = 1; i <= X; i++)  
{  
    Total = Total + i;  
}  
alert(Total);  
</SCRIPT>
```





## break陳述式的妙用

```
04:<SCRIPT LANGUAGE="javascript">
05:   var Result = 1;
06:   for(var i = 1; i <= 15; i++)
07:   {
08:     if (i > 6) break;
09:     Result = Result * i;
10:   }
11:   alert(Result);
12: </SCRIPT>
```

## 11-5 條件式迴圈

### 11-5-1 while

```
while(condition)
```

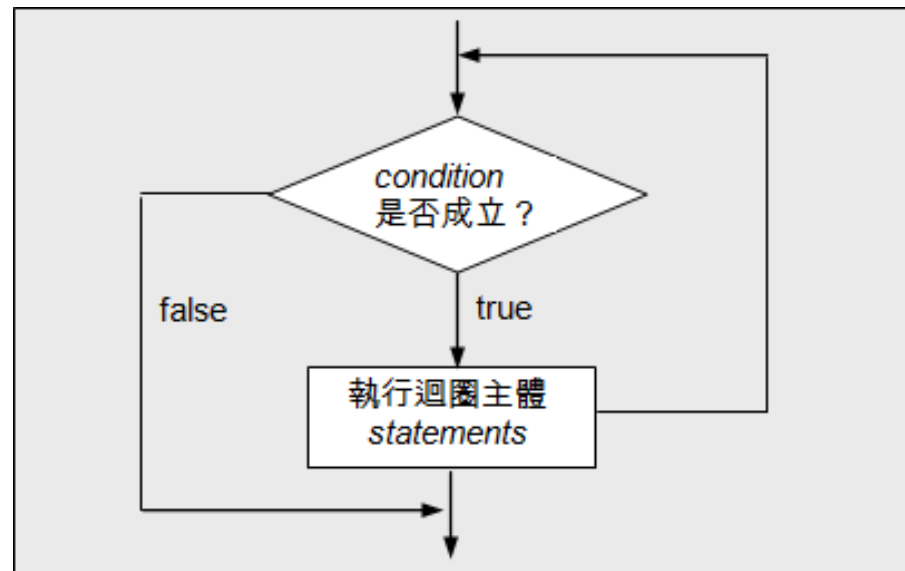
```
{
```

```
    statements;
```

```
    [break;]
```

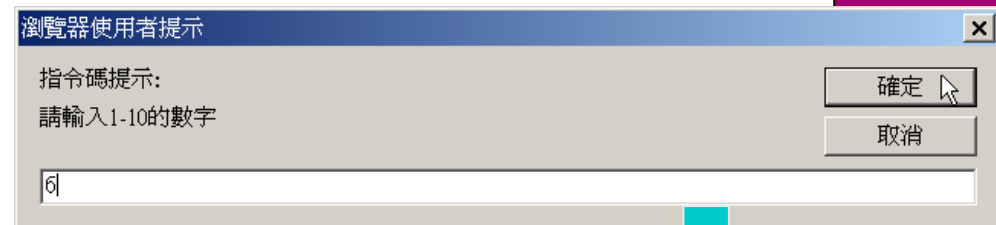
```
    statements;
```

```
}
```



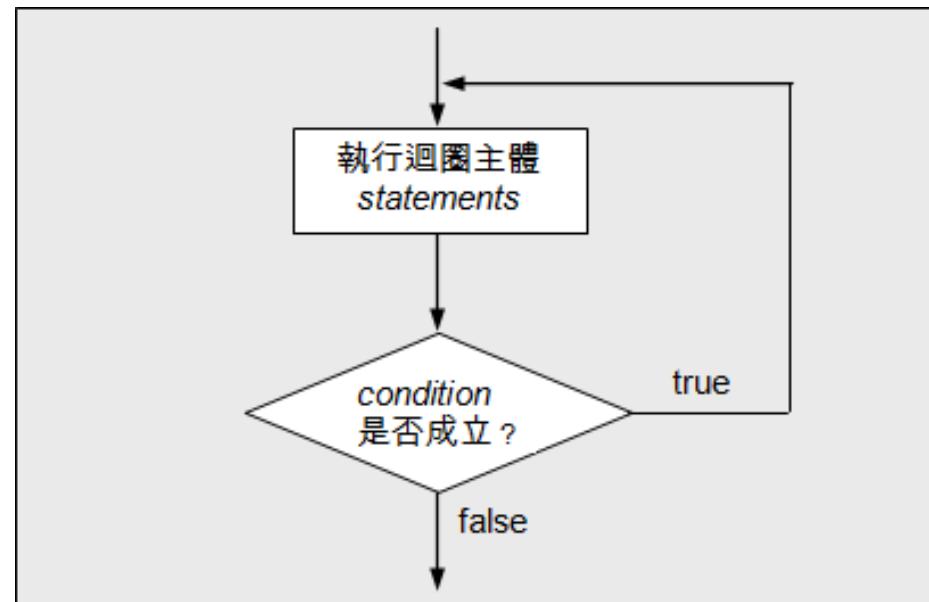
- 取自 \Ch11\Prac11-10.htm

```
<SCRIPT LANGUAGE="javascript">
var Number = prompt("請輸入1-10的數字", "");
while(Number != 6)
{
  if (Number > 6)
  {
    alert("太大了！請重新輸入！");
    Number = prompt("請輸入1-10的數字", "");
  }
  else if (Number < 6)
  {
    alert("太小了！請重新輸入！");
    Number = prompt("請輸入1-10的數字", "");
  }
}
alert("答對了！");
</SCRIPT>
```



## 11-5-2 do

```
do  
{  
    statements;  
    [break;]  
    statements;  
}while(condition);
```



- 取自 \Ch11\Prac11-11.htm

```
<SCRIPT LANGUAGE="javascript">  
do  
{  
  Number = prompt("請輸入1-10的數字", "");  
  if (Number > 6)  
  {  
    alert("太大了！請重新輸入！");  
  }  
  else if (Number < 6)  
  {  
    alert("太小了！請重新輸入！");  
  }  
}while(Number != 6)  
alert("答對了！");  
</SCRIPT>
```

## 11-5-3 break與continue

- 取自 \Ch11\Prac11-11.htm

```
<HTML>
<HEAD>
  <TITLE>流程控制範例</TITLE>
  <SCRIPT LANGUAGE="javascript">
    for (var i = 1; i <= 10; i++)
    {
      if (i < 10) continue;
      alert(i);
    }
  </SCRIPT>
</HEAD>
<BODY>
</BODY>
</HTML>
```



## 11-6 for...in

```
for (var identifier in expression)  
{  
    statements;  
    [break;]  
    statements;  
}
```

- 取自 \Ch11\Prac11-13.htm

```
<HTML>
```

```
<HEAD>
```

```
<TITLE>流程控制範例</TITLE>
```

```
<SCRIPT LANGUAGE="javascript">
```

```
var Students = new Array("小丸子", "小玉", "花輪");
```

```
for (var i in Students)
```

```
{
```

```
    alert(Students[i]);
```

```
}
```

```
</SCRIPT>
```

```
</HEAD>
```

```
<BODY>
```

```
</BODY>
```

```
</HTML
```



