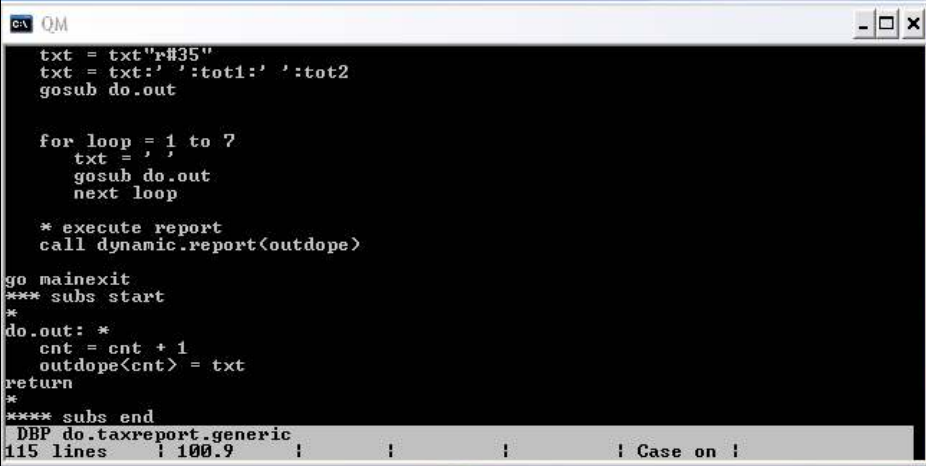


## Slide 1 - Slide 1



```
QM
txt = txt"r#35"
txt = txt:' ':tot1:' ':tot2
gosub do.out

for loop = 1 to 7
  txt = ' '
  gosub do.out
next loop

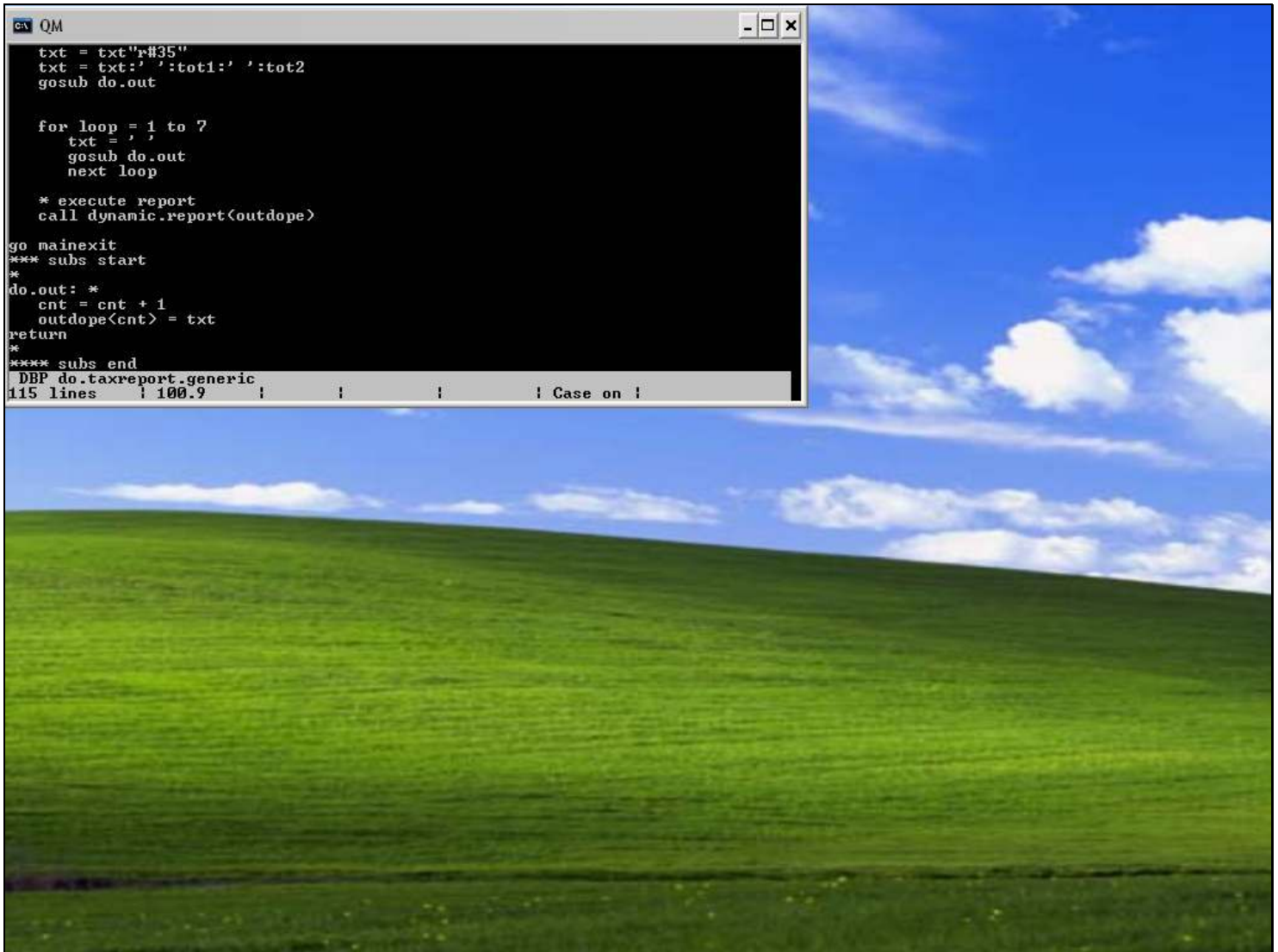
* execute report
call dynamic.report(outdope)

go mainexit
*** subs start
*
do.out: *
  cnt = cnt + 1
  outdope(cnt) = txt
return
*
**** subs end
DBP do.taxreport.generic
115 lines | 100.9 | | | | Case on |
```

### Slide notes

For Developers who write programs in IES, there is an IES system call that will dynamically turn text into a Report, without any further programming being required. On screen, we see a real IES Program that produces the Generic Tax Report. As the program logic develops, text lines are constructed and each time we have a text line ready for output, we perform the subroutine called "do.out".

## Slide 2 - Slide 2



```
QM
txt = txt"##35"
txt = txt:' ':tot1:' ':tot2
gosub do.out

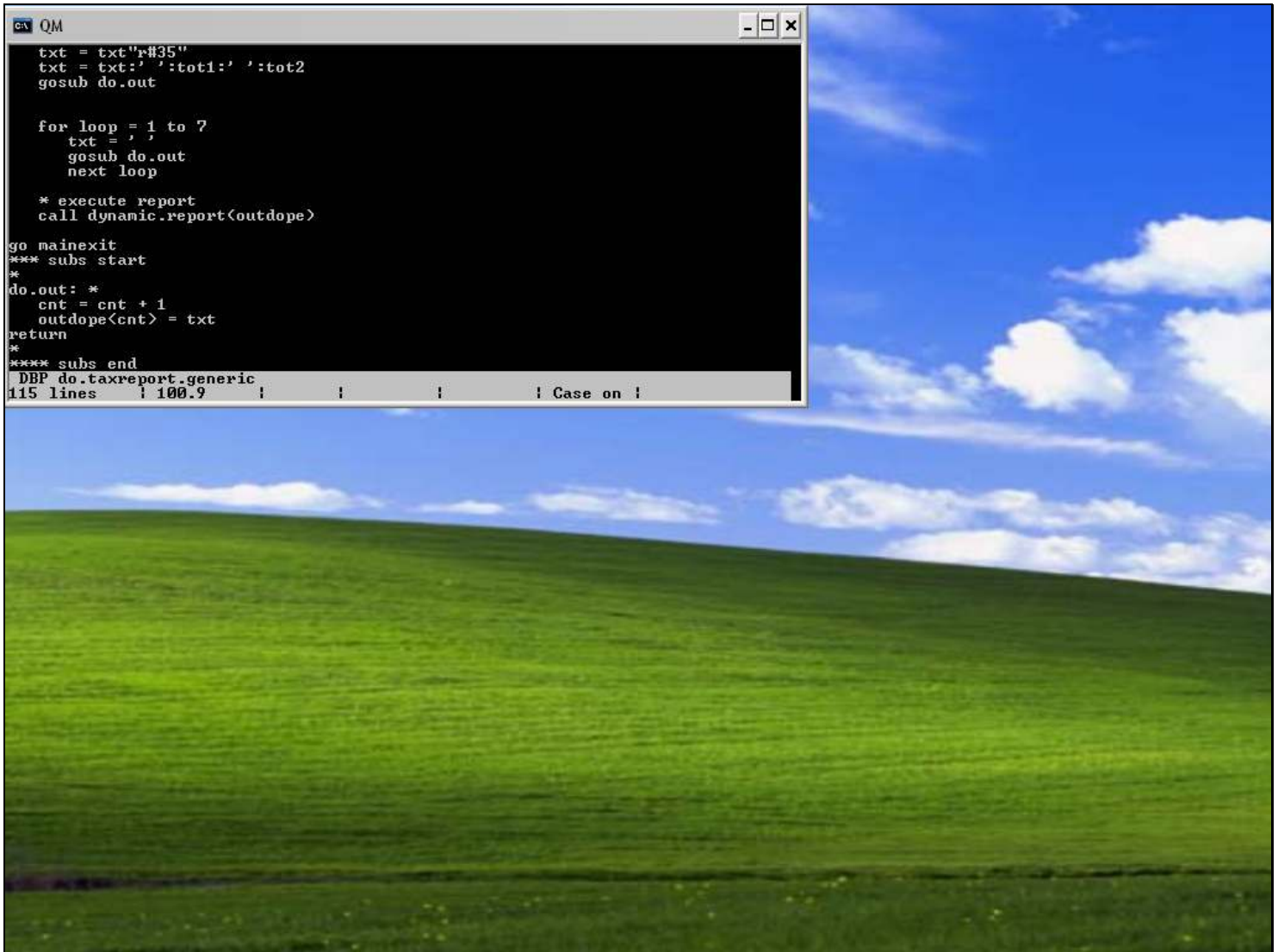
for loop = 1 to 7
  txt = ' '
  gosub do.out
next loop

* execute report
call dynamic.report(outdope)

go mainexit
*** subs start
*
do.out: *
  cnt = cnt + 1
  outdope[cnt] = txt
return
*
*** subs end
DBP do.taxreport.generic
115 lines | 100.9 | | | | Case on |
```

### Slide notes

At "do.out", all we do is to add another line at the end of the dynamic array.

**Slide 3 - Slide 3**

```
txt = txt"##35"
txt = txt:',' :tot1:',' :tot2
gosub do.out

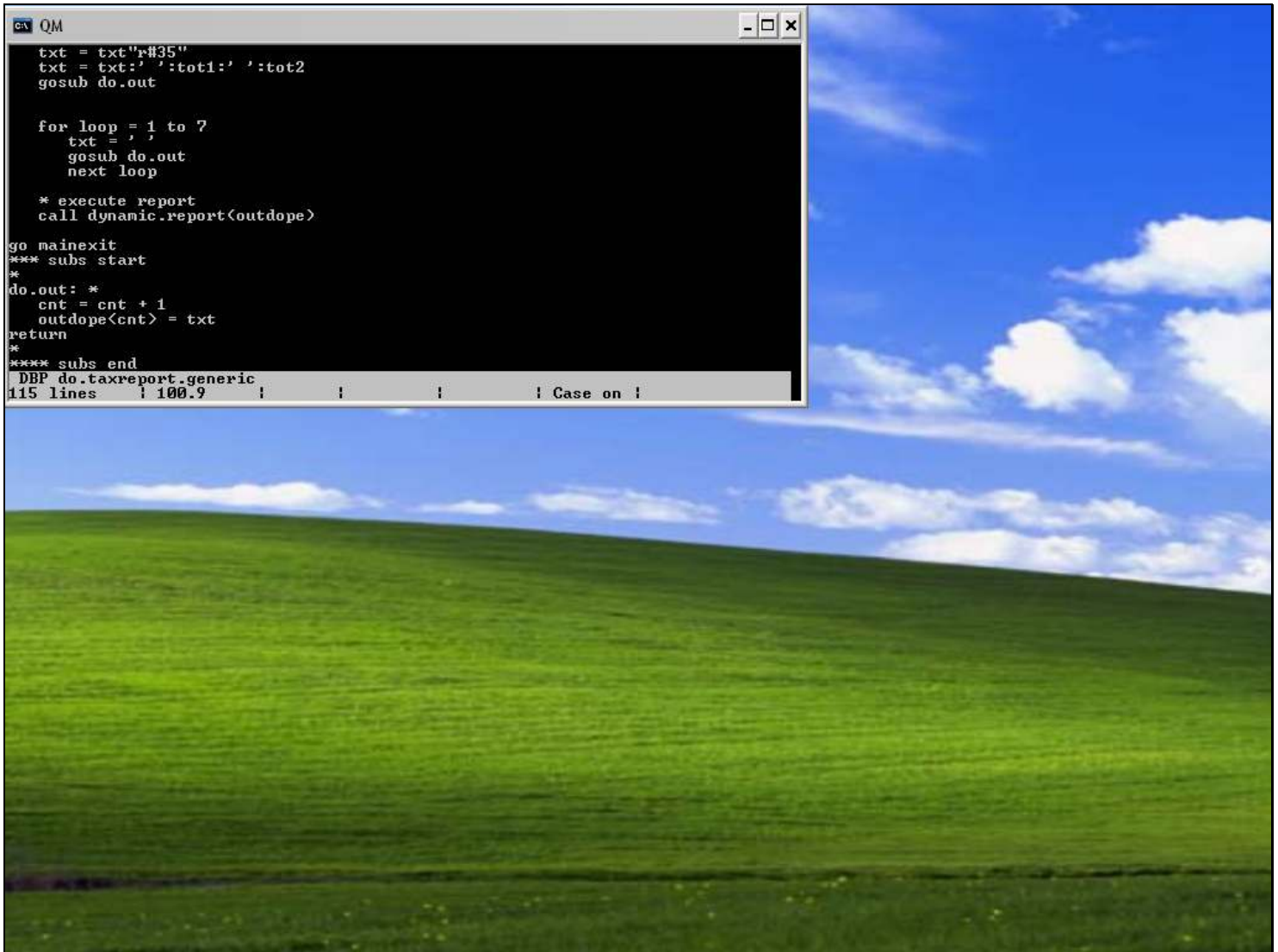
for loop = 1 to 7
  txt = ','
  gosub do.out
next loop

* execute report
call dynamic.report(outdope)

go mainexit
*** subs start
*
do.out: *
  cnt = cnt + 1
  outdope(cnt) = txt
return
*
*** subs end
DBP do.taxreport.generic
115 lines | 100.9 | | | | Case on |
```

**Slide notes**

And when we reach the point where we have produced all the necessary text lines, then we call the IES subroutine "dynamic.report" with 1 argument, and that argument is the dynamic array variable where we have been storing the text lines.

**Slide 4 - Slide 4****Slide notes**

Now, let us look at this example in practice, by performing the Generic Tax Report.

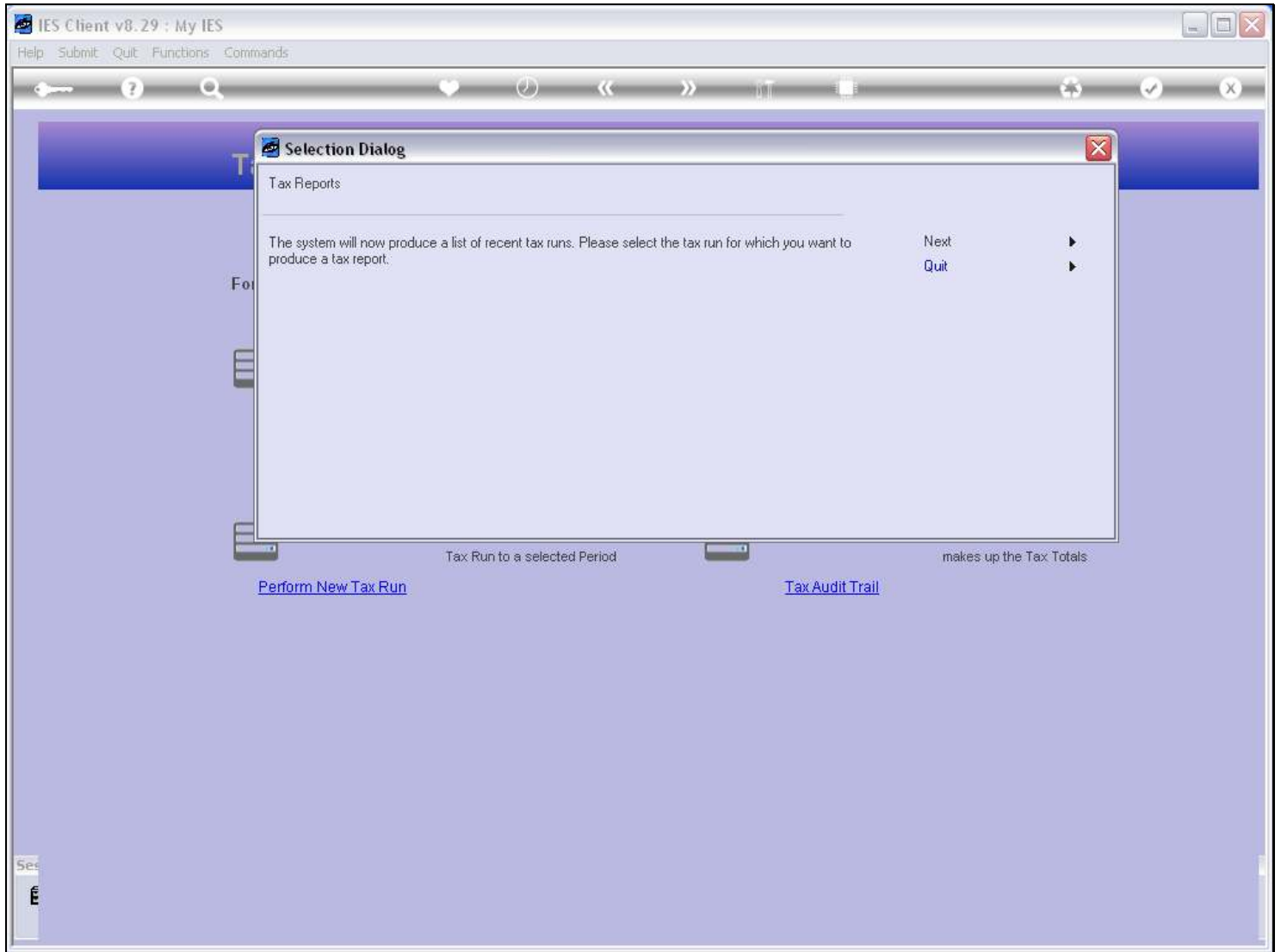


## Slide 5 - Slide 5



## Slide notes

Slide 6 - Slide 6



Slide notes

### Slide 7 - Slide 7

IES Client v8.29 : My IES

Help Submit Quit Functions Commands

## Please Choose the Data To Select -

The selection tips tell you what kind of selection rule is being applied ...

You may change any 'My Choice' value to prescribe which data should be selected ...

Selection Tip	My Choice
1 Operator Code = ?	[ ]
2 Final Period Number = ?	[ ]
3 Run Date >= ?	07/05/2010
4 Run Date <= ?	05/08/2010

Nex Pre Add Ins Ed Del

Next

### Slide notes

### Slide 8 - Slide 8

IES Client v8.29 : My IES

Help Submit Quit Functions Commands

## Please Choose the Data To Select -

The selection tips tell you what kind of selection rule is being applied ...

You may change any 'My Choice' value to prescribe which data should be selected ...

Selection Tip	My Choice
1 Operator Code = ?	[ ]
2 Final Period Number = ?	[ ]
3 Run Date >= ?	07/05/2010
4 Run Date <= ?	05/08/2010

Nex Pre Add Ins Ed Del

Next

### Slide notes



### Slide 9 - Slide 9

IES Client v8.29 : My IES

Help Infolab Connections Logon Logoff Companion Wizard How do I DataMarts Business Modules Action Focus Option Select

## Tax Run and Report Wizard

For standard VAT, GST, GCT, Other Tax: -

Use this option to query the parameters of a prior Tax Run

Use this option for the Tax Submission Data derived from a Tax Run

[Query Tax Run](#) [Tax Report](#)

**SINGLE SELECT: PLEASE SELECT TAX RUN**

**RECENT TAX RUNS**

1	0032	25/06/2010	111	[apr 2010]	Tt Terry
2	0031	25/06/2010	110	[mar 2010]	Tt Terry

[Perform](#)

Select ALL Show Full Line Cancel OK

for the Detail that  
s up the Tax Totals

### Slide notes

Slide 10 - Slide 10

IES Client v8.29 : My IES

Help Infolab Connections Logon Logoff Companion Wizard How do I DataMarts Business Modules Action Focus Option Select

### Tax Run and Report Wizard

For standard VAT, GST, GCT, Other Tax: -

Use this option to query the parameters of a prior Tax Run

Use this option for the Tax Submission Data derived from a Tax Run

[Query Tax Run](#) [Tax Report](#)

**SINGLE SELECT: PLEASE SELECT TAX RUN**

**RECENT TAX RUNS**

1	0032	25/06/2010	111	[apr 2010]	Tt Terry
2	0031	25/06/2010	110	[mar 2010]	Tt Terry

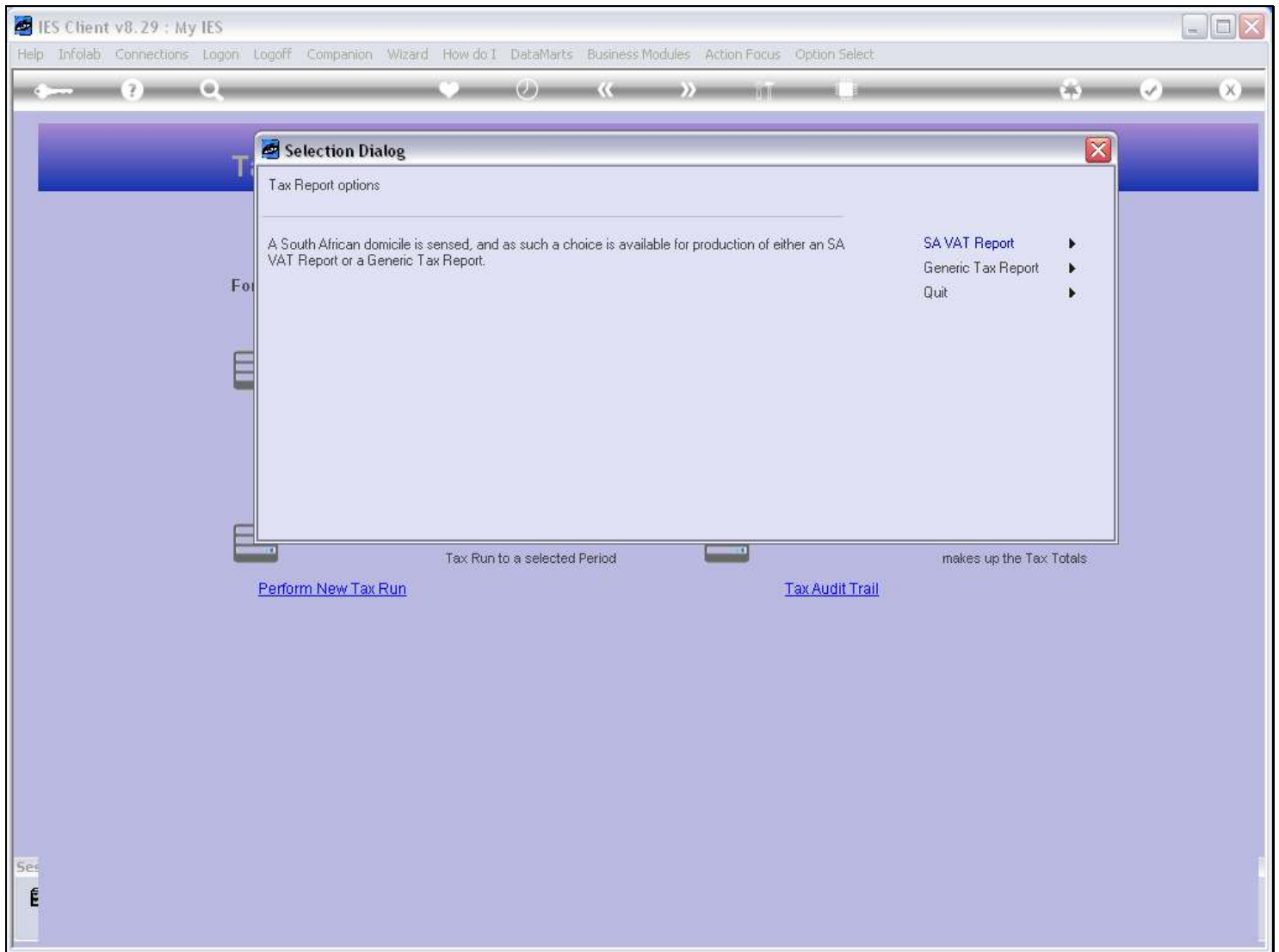
[Perform](#)

Select ALL Show Full Line Cancel OK

for the Detail that  
s up the Tax Totals

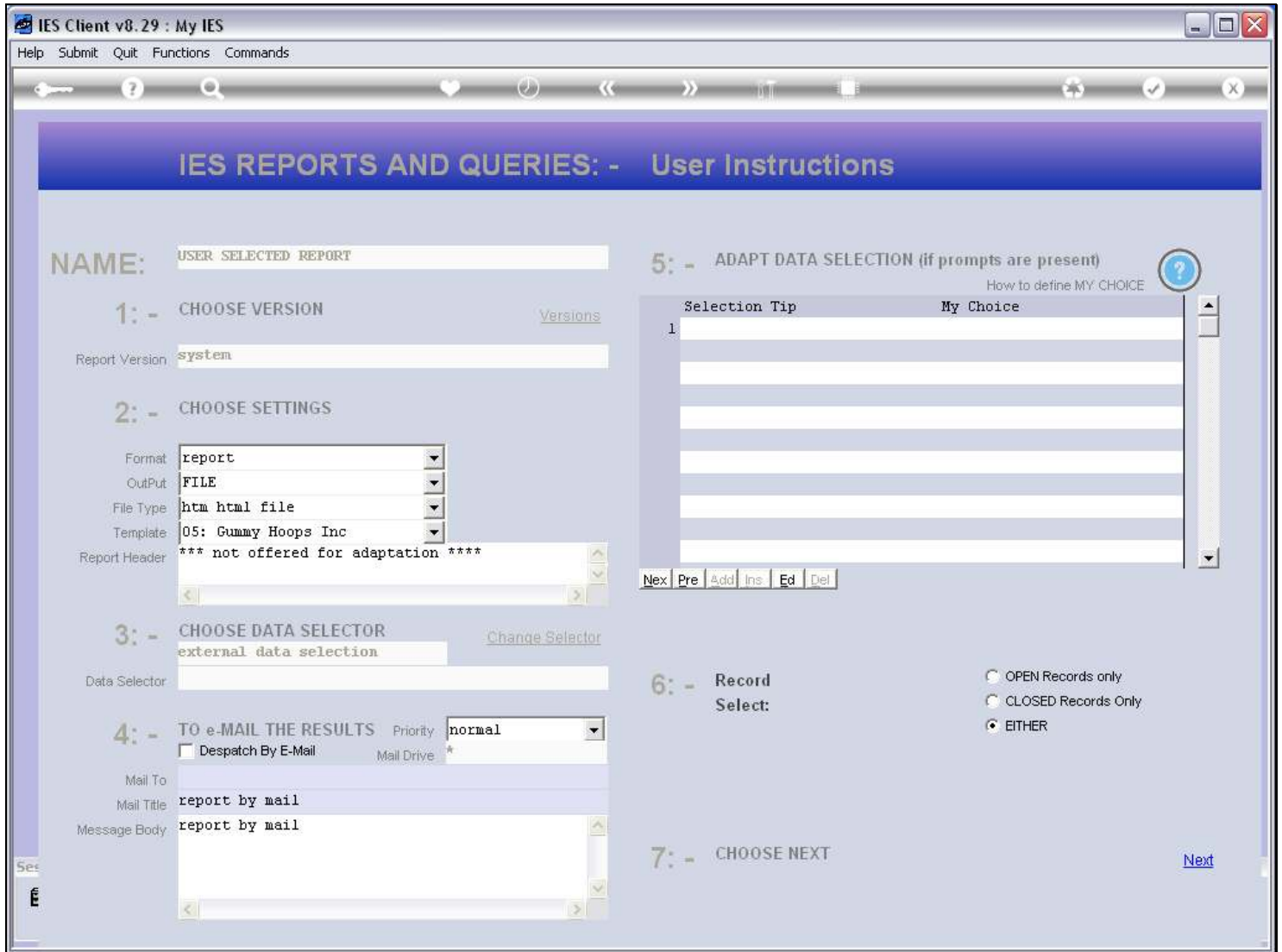
Slide notes

### Slide 11 - Slide 11



### Slide notes

Slide 12 - Slide 12



Slide notes

The call to "dynamic.report" will always automatically produce the Report, and there is always the standard pre-run screen where the User can choose the output format. In our 1st example, we will produce HTML output.

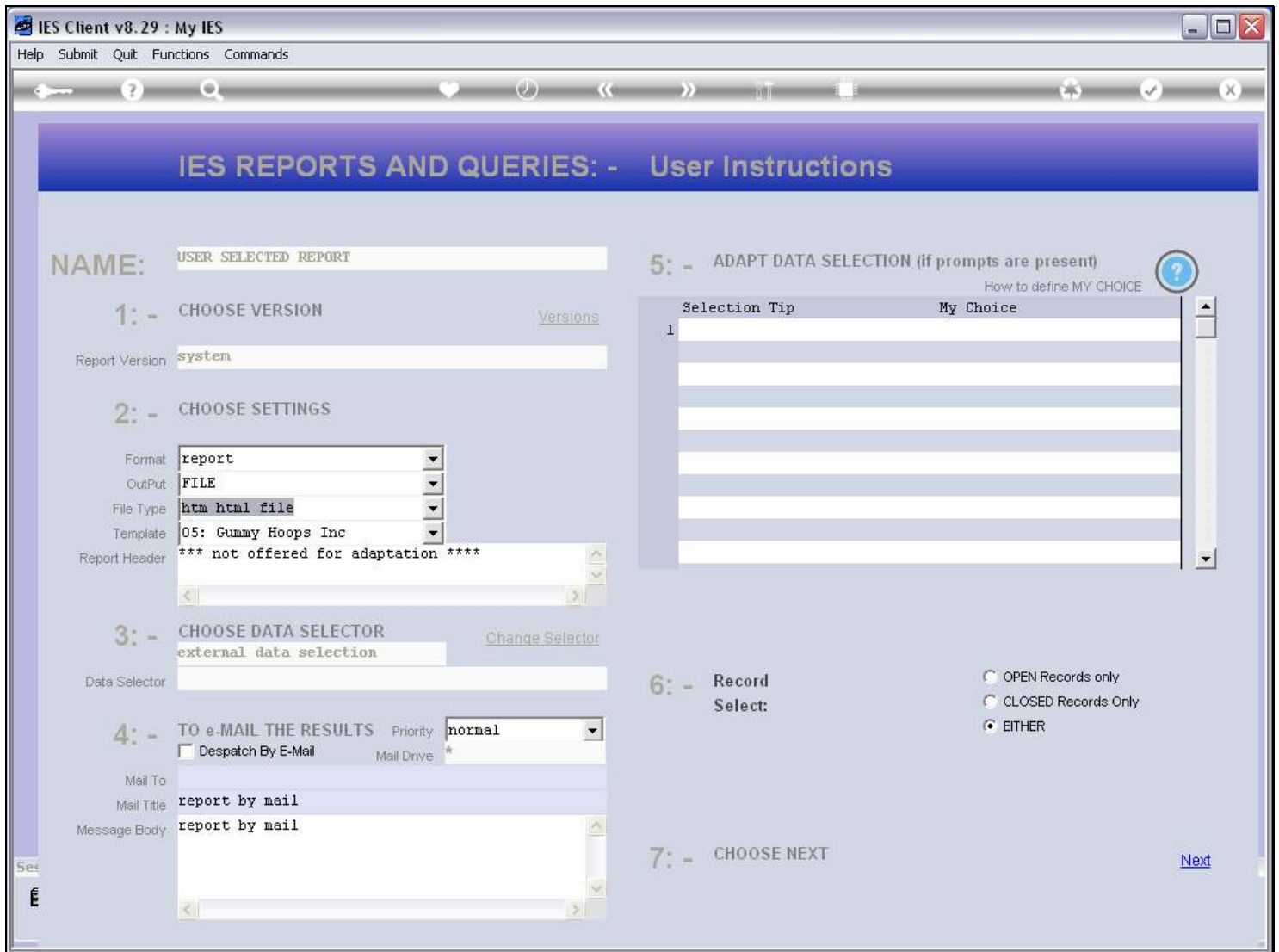
### Slide 13 - Slide 13

The screenshot shows the IES Client v8.29: My IES interface. The title bar includes 'Help', 'Submit', 'Quit', 'Functions', and 'Commands'. The main content area is titled 'IES REPORTS AND QUERIES: - User Instructions'. It contains several numbered steps:

- 1: - CHOOSE VERSION** (with a 'Versions' link): Report Version is set to 'system'.
- 2: - CHOOSE SETTINGS**: Format is 'report', OutPut is 'FILE', File Type is 'htm html file', Template is '05: Gummy Hoops Inc', and Report Header is '\*\*\* not offered for adaptation \*\*\*\*'.
- 3: - CHOOSE DATA SELECTOR** (with a 'Change Selector' link): Data Selector is 'external data selection'.
- 4: - TO e-MAIL THE RESULTS** (with a 'Priority' dropdown): Priority is 'normal'. There is a checkbox for 'Despatch By E-Mail' and a 'Mail Drive' field with an asterisk. Mail To, Mail Title, and Message Body are all set to 'report by mail'.
- 5: - ADAPT DATA SELECTION (if prompts are present)** (with a 'How to define MY CHOICE' link and a help icon): A table with columns 'Selection Tip' and 'My Choice' is shown. The first row contains '1'. Below the table are buttons: 'Nex', 'Pre', 'Add', 'Ins', 'Ed', 'Del'.
- 6: - Record Select:** Radio buttons for 'OPEN Records only', 'CLOSED Records Only', and 'EITHER' (which is selected).
- 7: - CHOOSE NEXT** (with a 'Next' link).

### Slide notes

### Slide 14 - Slide 14



### Slide notes



Slide 15 - Slide 15

The screenshot shows a Windows Internet Explorer browser window. The address bar contains the local file path: \\127.0.0.1\Bridge\H1555859381.HTM. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains various icons for search, share, and translation. The main content area displays the following text:

**Gummy Hoops Inc**

hello@gummyhoops.com www.gummyhoops.com

---

Gummy Hoops Inc.  
Tax Report

Based on Tax Run # 0032 as performed on 25/06/2010.  
Final Period included in this Tax Run = [111] Apr 2010.

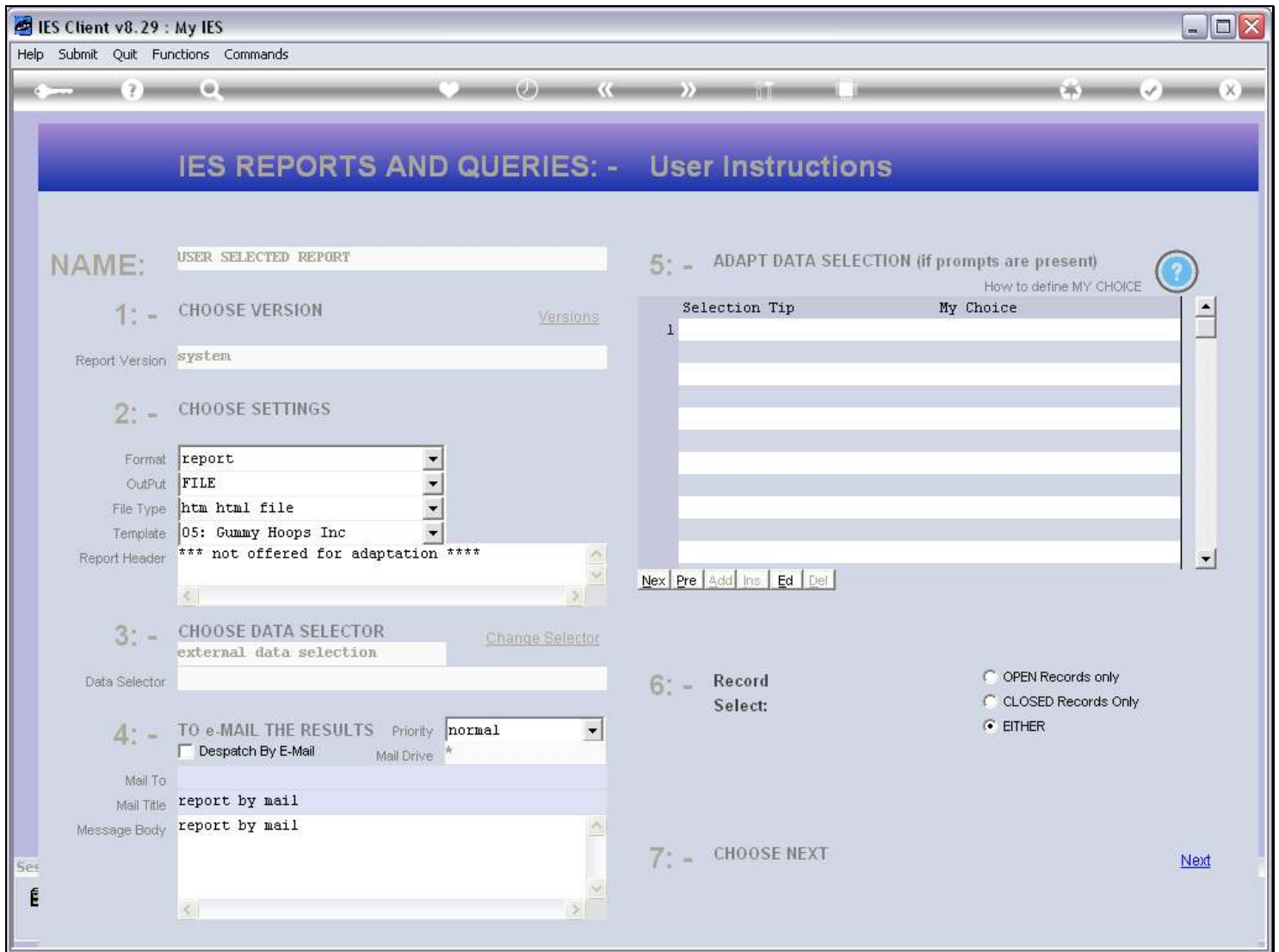
=====

Tax Account	Tax Type	Tax	Turnover
100000081	gst-imp GST Import	0.00	0.00
10000008k	gst GST Add-On Tax	0.00	0.00
1204303	01 PPN	0.00	0.00
10000008g	14 Capital Goods (I	0.00	0.00
10000008d	15 Non-Capital Good	622.35	6,828.50
10000008u	16 Change in Use (I	0.00	0.00
10000008v	17 Bad Debts (Input	0.00	0.00
10000008w	18 Other (Input) Va	0.00	0.00
taxacctvar	var Variable Tax	0.00	0.00
10000008b	1 Std Rate VAT excl	-4,845.32	-39,454.73
10000008e	10 Change in Use an	0.00	0.00
10000008f	12 Other	0.00	0.00
10000008h	1a Std Rate VAT ONL	0.00	0.00
10000008i	2 Zero Rate Excludi	0.00	0.00
10000008c	3 Exempt and non-Su	0.00	0.00
10000008x	5 Accommodation > 4	0.00	0.00
10000008z	7 Accommodation <=	0.00	0.00
	pay(-) / refund(+)	-4,222.97	-32,626.23

Slide notes

And this is the result. In other words, without any programming at all, just by putting some text into a variable and then calling the IES subroutine "dynamic.report", this is our result.

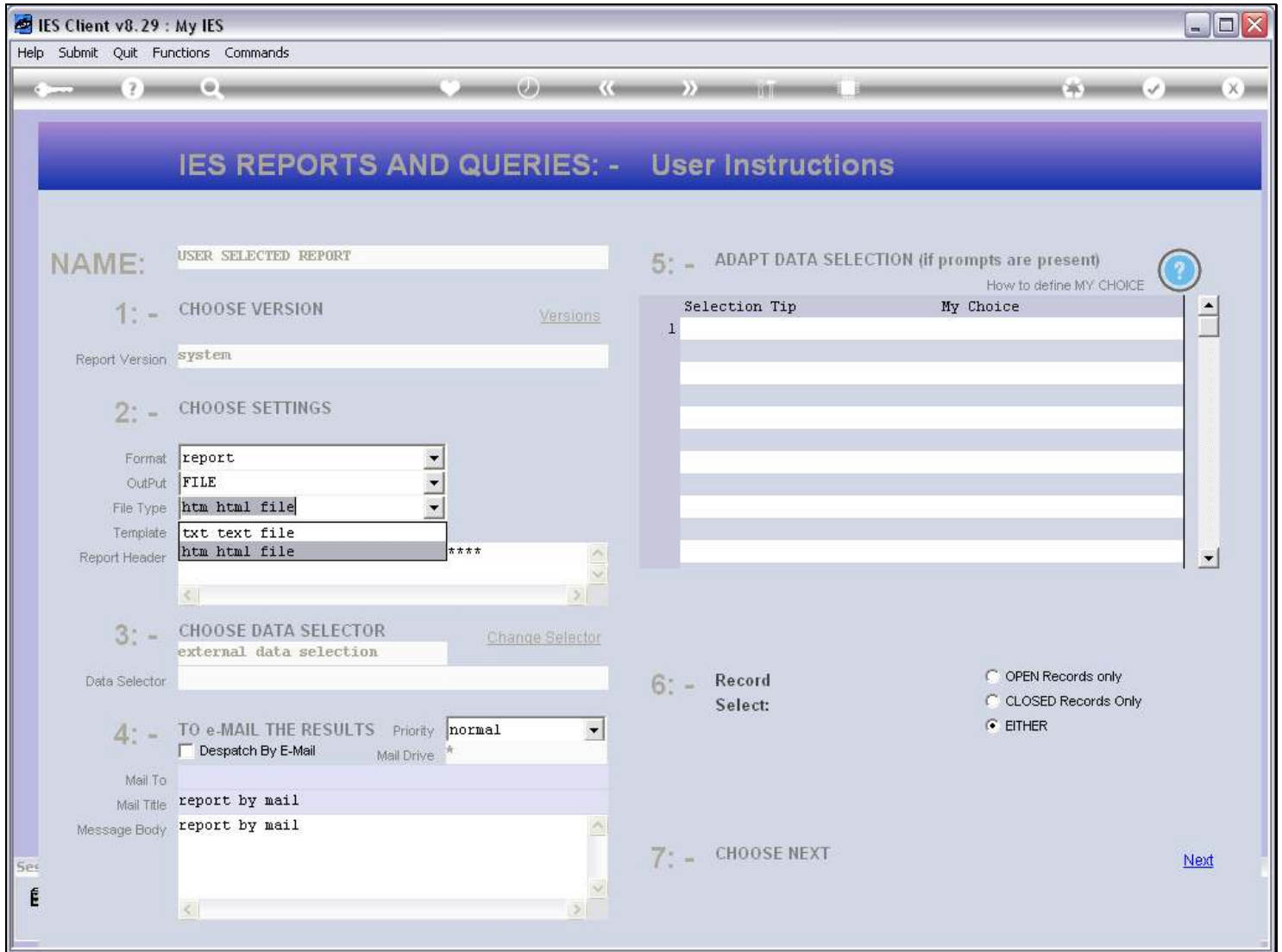
### Slide 16 - Slide 16



### Slide notes

The User can also choose a Text output.

Slide 17 - Slide 17



Slide notes

Slide 18 - Slide 18

The screenshot shows the IES Client v8.29: My IES interface. The title bar includes 'Help', 'Submit', 'Quit', 'Functions', and 'Commands'. The main content area is titled 'IES REPORTS AND QUERIES: - User Instructions'. It is divided into several numbered steps:

- 1: - CHOOSE VERSION**: Includes a 'Report Version' field set to 'system' and a 'Versions' link.
- 2: - CHOOSE SETTINGS**: Includes dropdown menus for 'Format' (report), 'OutPut' (FILE), 'File Type' (txt text file), and 'Template' (05: Gummy Hoops Inc). A 'Report Header' field contains '\*\*\* not offered for adaptation \*\*\*\*'.
- 3: - CHOOSE DATA SELECTOR**: Includes a 'Data Selector' field set to 'external data selection' and a 'Change Selector' link.
- 4: - TO e-MAIL THE RESULTS**: Includes a 'Priority' dropdown (normal), a 'Despatch By E-Mail' checkbox, a 'Mail Drive' field, and 'Mail To', 'Mail Title', and 'Message Body' fields.
- 5: - ADAPT DATA SELECTION (if prompts are present)**: Includes a 'How to define MY CHOICE' section with a table:

Selection Tip	My Choice
1	
- 6: - Record Select:** Includes radio buttons for 'OPEN Records only', 'CLOSED Records Only', and 'EITHER'.
- 7: - CHOOSE NEXT**: Includes a 'Next' link.

Slide notes

Slide 19 - Slide 19

IES Client v8.29 : My IES

T1555859445.TXT - Notepad

Gummy Hoops Inc.  
Tax Report

Based on Tax Run # 0032 as performed on 25/06/2010.  
Final Period included in this Tax Run = [1111] Apr 2010.

Tax Account	Tax Type	Tax	Turnover
100000081	gst-imp GST Import	0.00	0.00
10000008k	gst GST Add-On Tax	0.00	0.00
1204303	01 PPN	0.00	0.00
10000008g	14 Capital Goods (I	0.00	0.00
10000008d	15 Non-Capital Good	622.35	6,828.50
10000008u	16 Change in Use (I	0.00	0.00
10000008v	17 Bad Debts (Input	0.00	0.00
10000008w	18 Other (Input) Va	0.00	0.00
taxacctvar	var Variable Tax	0.00	0.00
10000008b	1 Std Rate VAT excl	-4,845.32	-39,454.73
10000008e	10 Change in Use an	0.00	0.00
10000008f	12 Other	0.00	0.00
10000008h	1a Std Rate VAT ONL	0.00	0.00
10000008i	2 Zero Rate Excludi	0.00	0.00
10000008c	3 Exempt and non-Su	0.00	0.00
10000008x	5 Accommodation > 4	0.00	0.00
10000008z	7 Accommodation <=	0.00	0.00
pay(-) / refund(+)		-4,222.97	-32,626.23

Slide notes

And in such case, the result changes to this format.

Slide 20 - Slide 20

IES Client v8.29 : My IES

T1555859445.TXT - Notepad

Gummy Hoops Inc.  
Tax Report

Based on Tax Run # 0032 as performed on 25/06/2010.  
Final Period included in this Tax Run = [1111] Apr 2010.

Tax Account	Tax Type	Tax	Turnover
100000081	gst-imp GST Import	0.00	0.00
10000008k	gst GST Add-On Tax	0.00	0.00
1204303	01 PPN	0.00	0.00
10000008g	14 Capital Goods (I	0.00	0.00
10000008d	15 Non-Capital Good	622.35	6,828.50
10000008u	16 Change in Use (I	0.00	0.00
10000008v	17 Bad Debts (Input	0.00	0.00
10000008w	18 Other (Input) Va	0.00	0.00
taxacctvar	var Variable Tax	0.00	0.00
10000008b	1 Std Rate VAT excl	-4,845.32	-39,454.73
10000008e	10 Change in Use an	0.00	0.00
10000008f	12 Other	0.00	0.00
10000008h	1a Std Rate VAT ONL	0.00	0.00
10000008i	2 Zero Rate Excludi	0.00	0.00
10000008c	3 Exempt and non-Su	0.00	0.00
10000008x	5 Accommodation > 4	0.00	0.00
10000008z	7 Accommodation <=	0.00	0.00
pay(-) / refund(+)		-4,222.97	-32,626.23

Slide notes



Slide 21 - Slide 21

IES Client v8.29 : My IES

T1555859445.TXT - Notepad

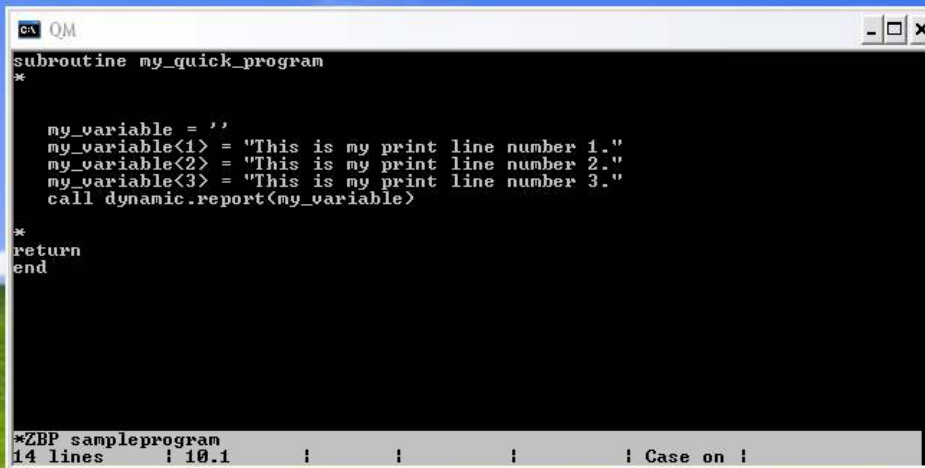
Gummy Hoops Inc.  
Tax Report

Based on Tax Run # 0032 as performed on 25/06/2010.  
Final Period included in this Tax Run = [1111] Apr 2010.

Tax Account	Tax Type	Tax	Turnover
10000008l	gst-imp GST Import	0.00	0.00
10000008k	gst GST Add-On Tax	0.00	0.00
1204303	01 PPN	0.00	0.00
10000008g	14 Capital Goods (I	0.00	0.00
10000008d	15 Non-Capital Good	622.35	6,828.50
10000008u	16 Change in Use (I	0.00	0.00
10000008v	17 Bad Debts (Input	0.00	0.00
10000008w	18 Other (Input) Va	0.00	0.00
taxacctvar	var Variable Tax	0.00	0.00
10000008b	1 Std Rate VAT excl	-4,845.32	-39,454.73
10000008e	10 Change in Use an	0.00	0.00
10000008f	12 Other	0.00	0.00
10000008h	1a Std Rate VAT ONL	0.00	0.00
10000008i	2 Zero Rate Excludi	0.00	0.00
10000008c	3 Exempt and non-Su	0.00	0.00
10000008x	5 Accommodation > 4	0.00	0.00
10000008z	7 Accommodation <=	0.00	0.00
pay(-) / refund(+)		-4,222.97	-32,626.23

Slide notes

## Slide 22 - Slide 22



```
subroutine my_quick_program
*
  my_variable = ''
  my_variable<1> = "This is my print line number 1."
  my_variable<2> = "This is my print line number 2."
  my_variable<3> = "This is my print line number 3."
  call dynamic.report(my_variable)
*
return
end

*ZBP sampleprogram
14 lines | 10.1 | | | | Case on |
```

**Slide notes**

For clarity, we now make it easier to see what is required. Here is a program that will produce a Report with 3 Lines. We just put the text into a variable, then we call "dynamic.report" with that variable as the argument.