Lab 6

In this lab you will learn the following:

C++ API (p. 273), Developing plug-ins (p. 288), HelloWorld2 plug-in (p. 296), Commands (p. 308), Posts1 plug-in (p. 310), Posts2 plug-in (p. 316), Posts3 plug-in (p. 318), Posts4 plug-in (p. 322), Maya's Undo/Redo mechanism (p. 325), Posts5 plug-in (p. 331).

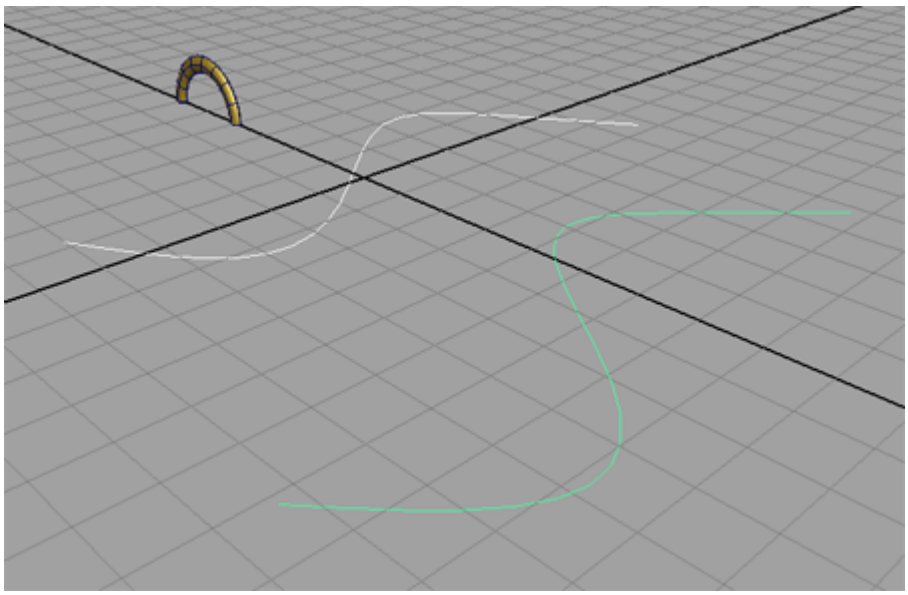
Working methods:
Study pages 273-334.

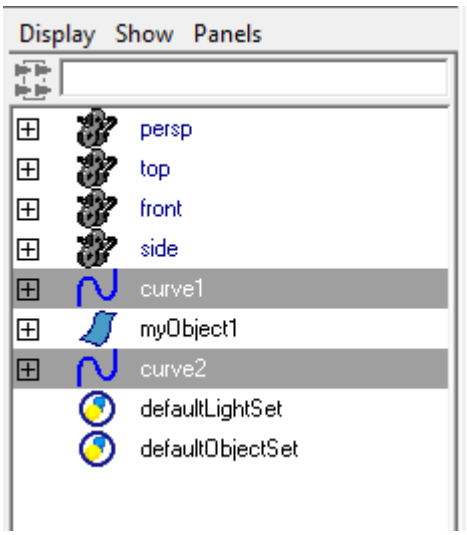
Assignment:

Write a command based Maya plug-in that duplicates any object in the scene called myObject1 along the selected parametric curve/s.

Name the plug-in command mplab6.

In the picture bellow is the initial situation with 2 parametric curves selected.

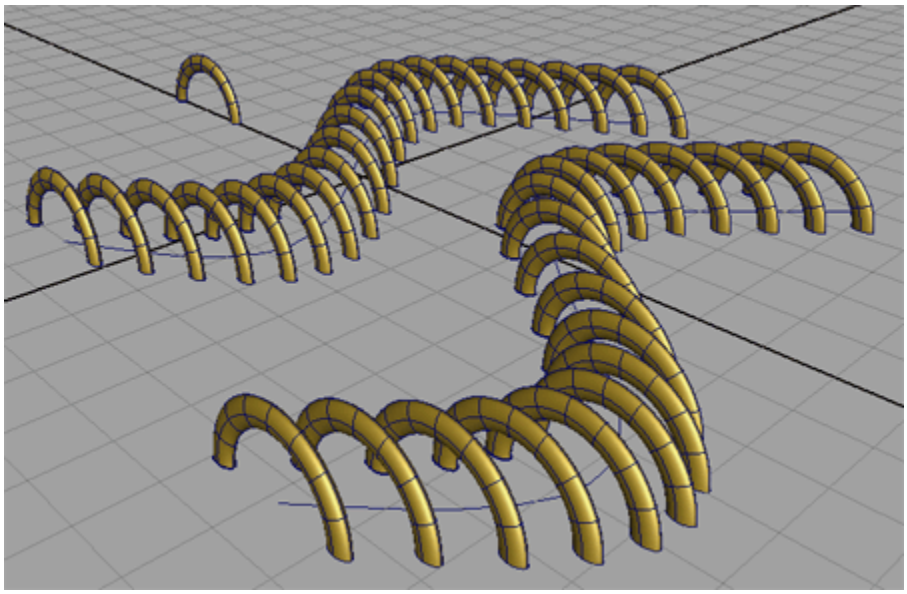




After executing the mplab6 plug-in command and passing 20 as the number of objects along each curve:

```
mplab6 -number 20;
```

we obtain the results in the picture bellow:



Your plug-in should support undo / redo operations, implement quick help and accept the following parameters:

```
help mplab6;
// Result:

Synopsis: mplab6 [flags]
Flags:
   -h -help
  -he -height  Float
  -nr -number  Int
   -r -random
```

-help = short description of what plug-in does

-height = height of duplicates

-number = number of duplicates along each curve

-random = duplicates have a randomly generated height (see picture bellow)

Here is an example of executing the plug-in with a –random option:

```
mplab6 -random;
```