

Shape Interrogation for CAD/CAM

subc.c

Subdivide an open NURBS curve at u.

Do:

```
prompt> make subc
```

```
prompt> subc -i input_curve_file -u u_value [-o output_curve_file_1,output_curve_file_2]
```

Note: No spaces before or after the "comma" in -o command line option.

Example:

Example 1.5.1 of the hyperbook (or in pages 30-31 of the hardcopy version) to subdivide the curve at $\theta = 45^\circ$ (i.e. at $u = 0.414213562$)

```
prompt> subc -i c.curv -u 0.414213562 -o c1.curv,c2.curv
```

Note: For the file format of the input curve (c.curv), see ../README.pdf

subs.c

Subdivide an open NURBS surface along u (or v).

Do:

```
prompt> make subs
```

```
prompt> subs -i input_surface_file -u u_value (or -v v_value) [-o  
output_surface_file_1,output_surface_file_2]
```

Note: No spaces before or after the "comma" in -o command line option.

Example:

Example 1.5.2 of the hyperbook (or in pages 32-33 of the hardcopy version)

(1) subdivide the surface along $\theta = 45^\circ$ (i.e. along $u = 0.414213562$):

```
prompt> subs -i s.surf -u 0.414213562 -o s1.surf,s2.surf
```

(2) subdivide the surface along $\phi = 45^\circ$ (i.e. along $v = 0.414213562$):

```
prompt> subs -i s.surf -v 0.414213562 -o s3.surf,s4.surf
```

Note: For the file format of the input surface (s.surf), see ../README.pdf