

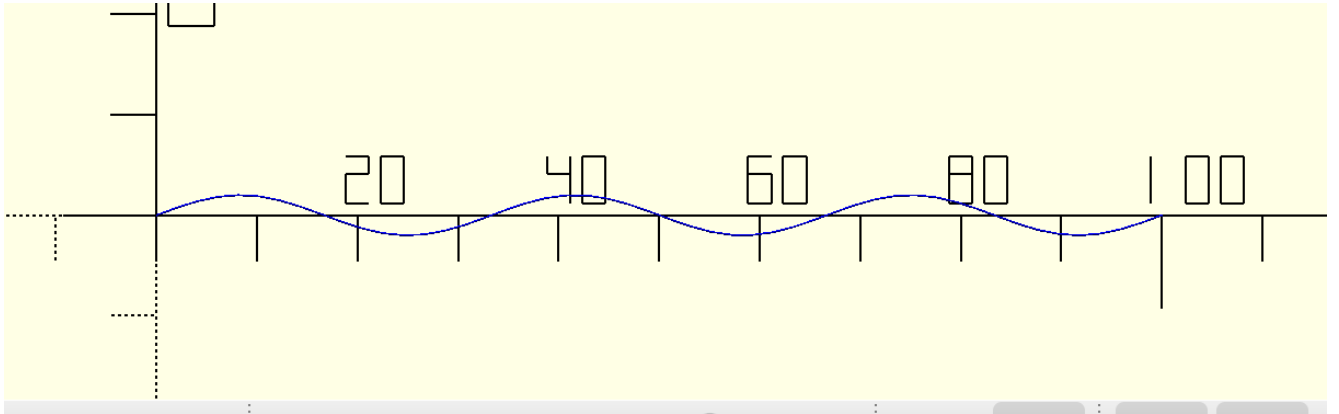
Creating surfaces

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In [1]: from openscad1 import *
```

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In [43]: # create a sketch in 2d
sketch1= [[i,2*sin(3*360/100*d2r(i))] for i in linspace(0,100,50)]

with open('trial.scad','w+') as f:
    f.write(f'''
include<dependencies2.scad>
color("blue")p_line3d({sketch1},.2);

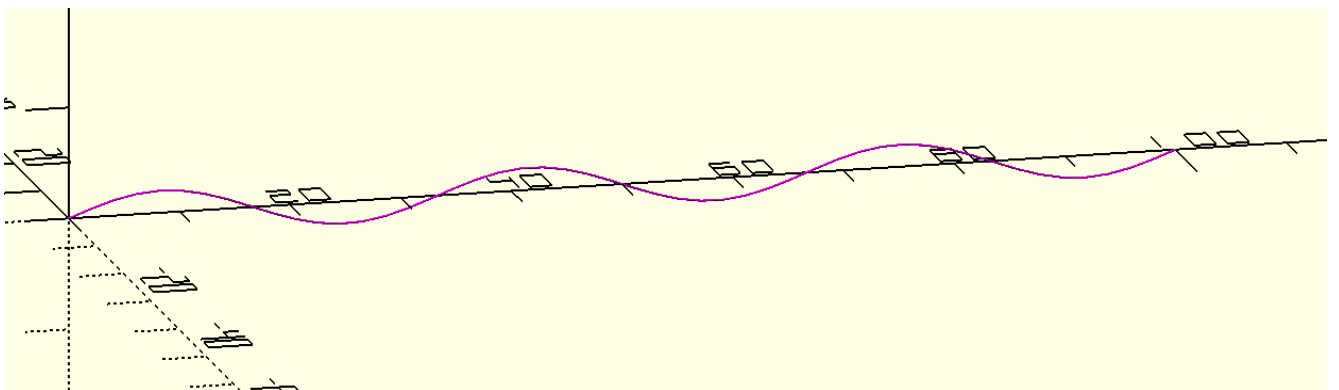
''')
```



```
In [44]: # rotate sketch around x-axis
sketch2=q_rot(['x90'],sketch1)

with open('trial.scad','w+') as f:
    f.write(f'''
include<dependencies2.scad>
color("magenta")p_line3d({sketch2},.2);

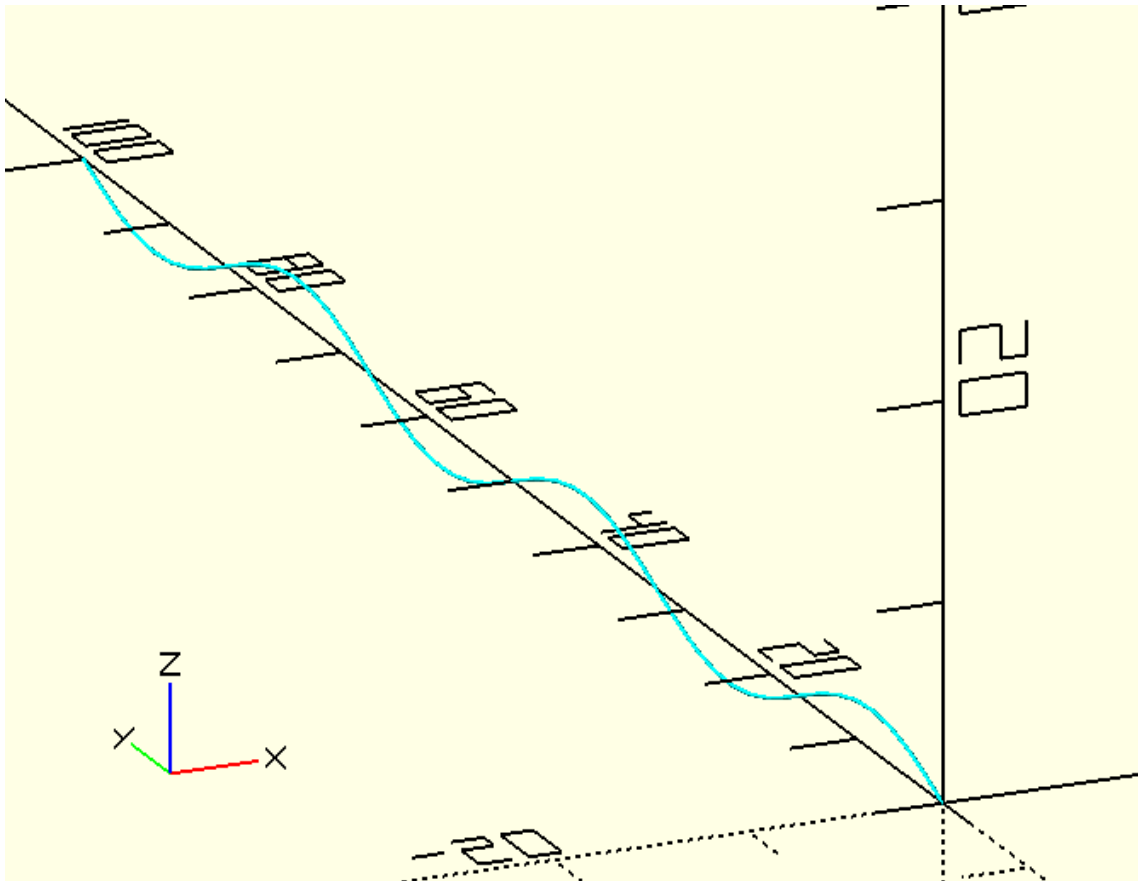
''')
```



```
In [45]: # rotate sketch2 around z-axis by 90 degrees
sketch3=q_rot(['z90'],sketch2)

with open('trial.scad','w+') as f:
    f.write(f'''
include<dependencies2.scad>
color("cyan")p_line3d({sketch3},.2);

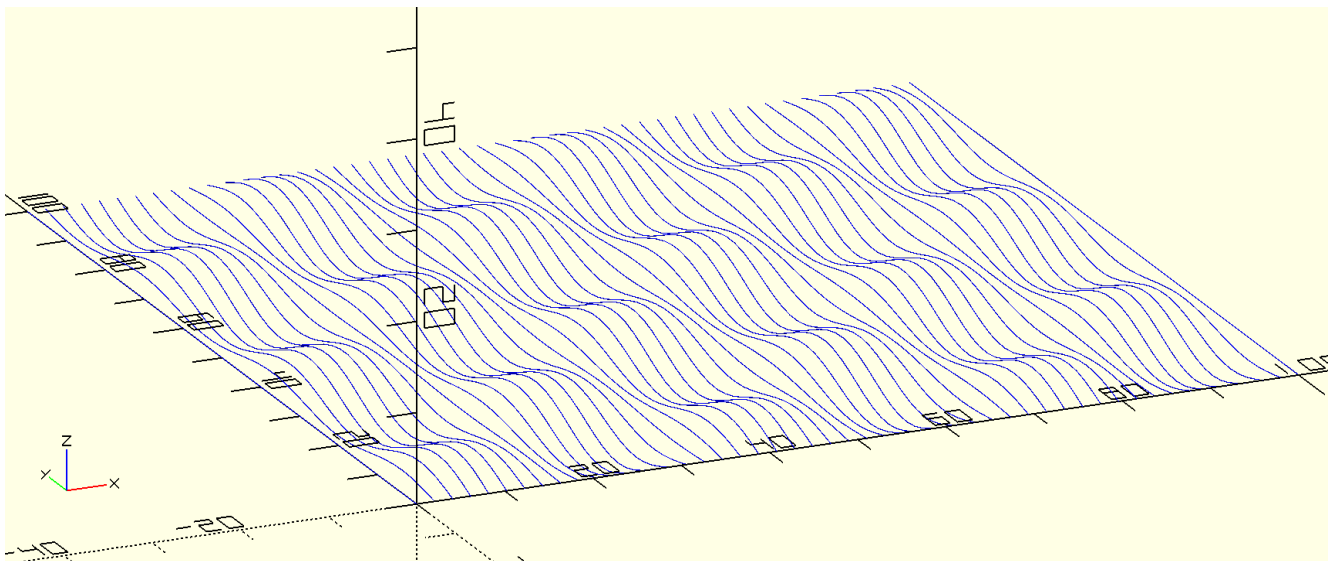
''')
```



```
In [46]: # create surface with the above sketch2 and sketch3
surf1=surface_from_2_waves(sketch2,sketch3,amplitude=2)

with open('trial.scad','w+') as f:
    f.write(f'''
    include<dependencies2.scad>

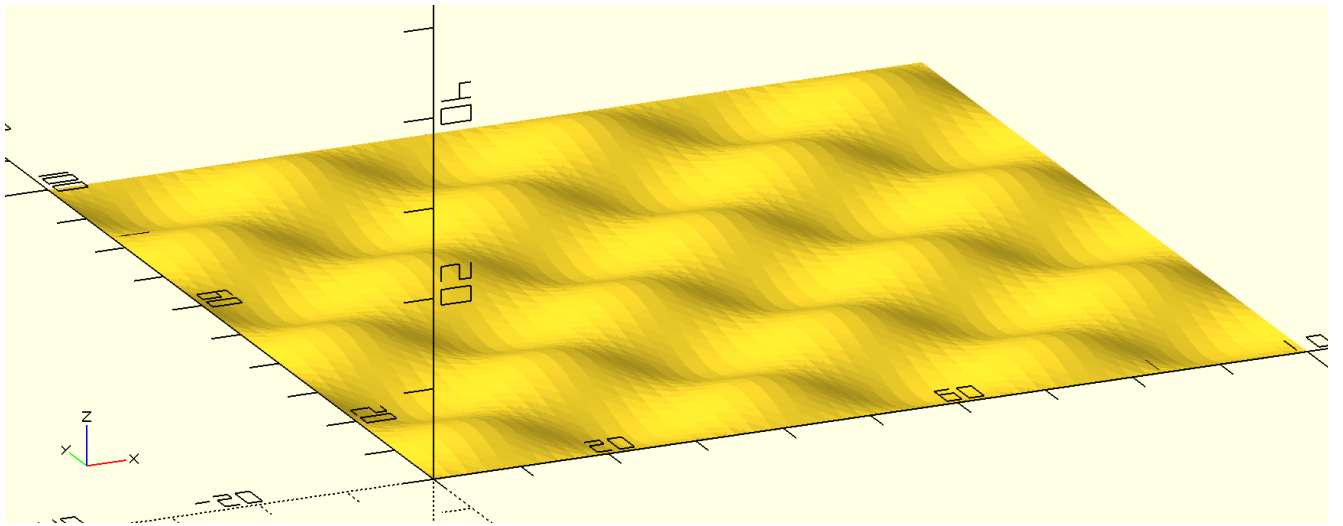
    color("blue")for(p={surf1})p_line3d(p,.1);
    ''')
```



```
In [47]: # create a surface with thickness 0.1mm
surf2=surf_extrude(surf1,-.1)
with open('trial.scad','w+') as f:
    f.write(f'''
    include<dependencies2.scad>

    // swp is a module for rendering objects from points
    {swp(surf2)}
```

...)



In []: