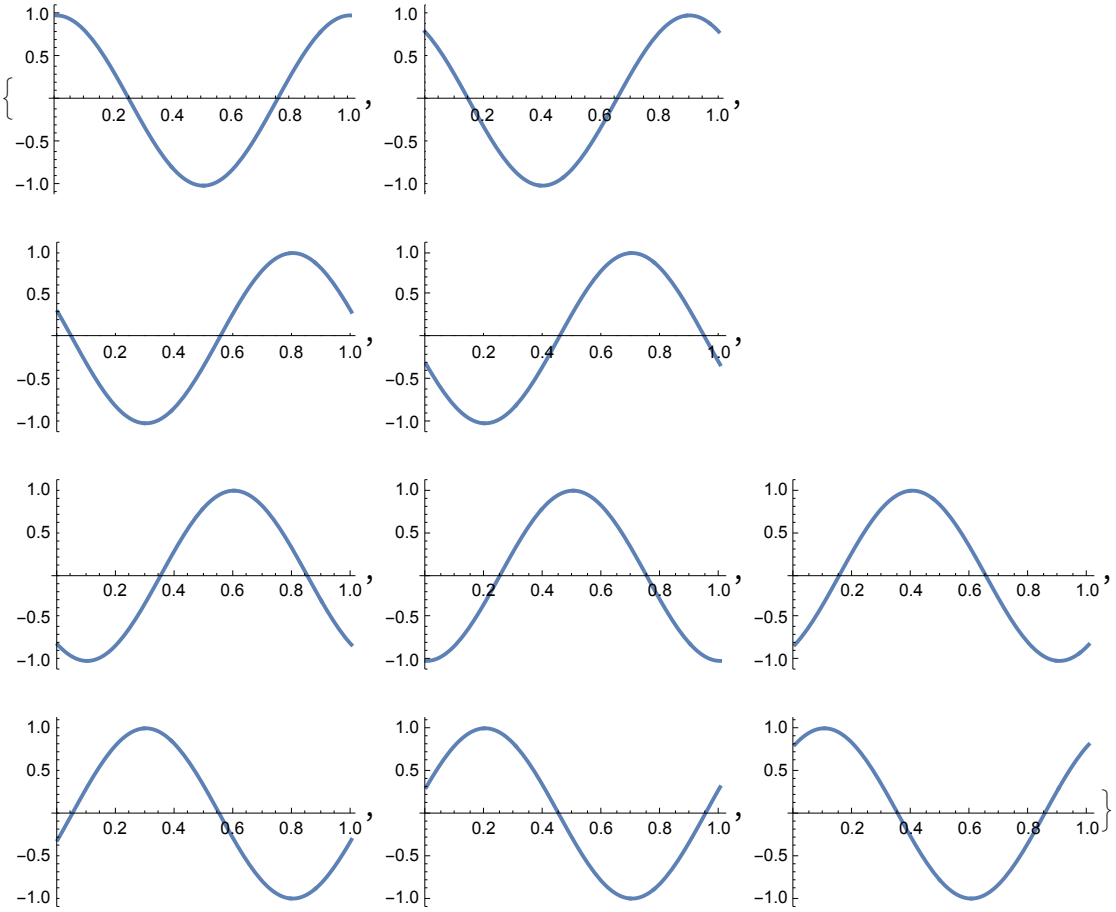
In[1]:=
```
x = Table[k, {k, 100}] / 100.
```

Out[1]=
```
{0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.1, 0.11, 0.12, 0.13,
 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.2, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26,
 0.27, 0.28, 0.29, 0.3, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37, 0.38,
 0.39, 0.4, 0.41, 0.42, 0.43, 0.44, 0.45, 0.46, 0.47, 0.48, 0.49, 0.5, 0.51,
 0.52, 0.53, 0.54, 0.55, 0.56, 0.57, 0.58, 0.59, 0.6, 0.61, 0.62, 0.63,
 0.64, 0.65, 0.66, 0.67, 0.68, 0.69, 0.7, 0.71, 0.72, 0.73, 0.74, 0.75,
 0.76, 0.77, 0.78, 0.79, 0.8, 0.81, 0.82, 0.83, 0.84, 0.85, 0.86, 0.87,
 0.88, 0.89, 0.9, 0.91, 0.92, 0.93, 0.94, 0.95, 0.96, 0.97, 0.98, 0.99, 1.}
```

In[6]:=
```
Table[Plot[Cos[2 * Pi * (x + 0.1 * (i - 1))], {x, 0, 1}], {i, 10}]
```

Out[6]=

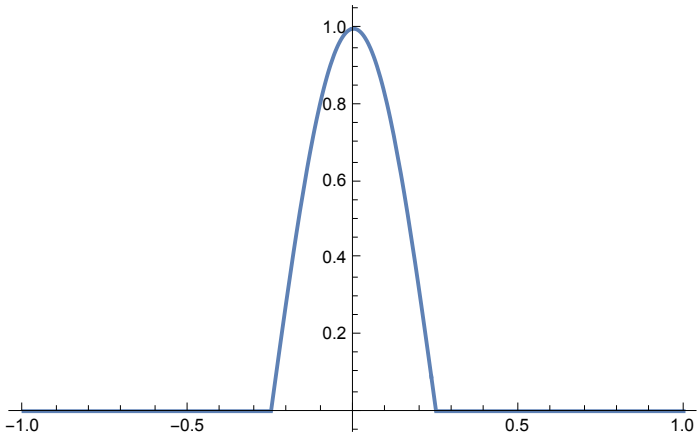


In[7]:=
```
g[x_] := If[-Pi / 2. ≤ x ≤ Pi / 2., Cos[x], 0]
```

In[11]:=
```
g1[x_] := g[x * 2 * Pi]
```

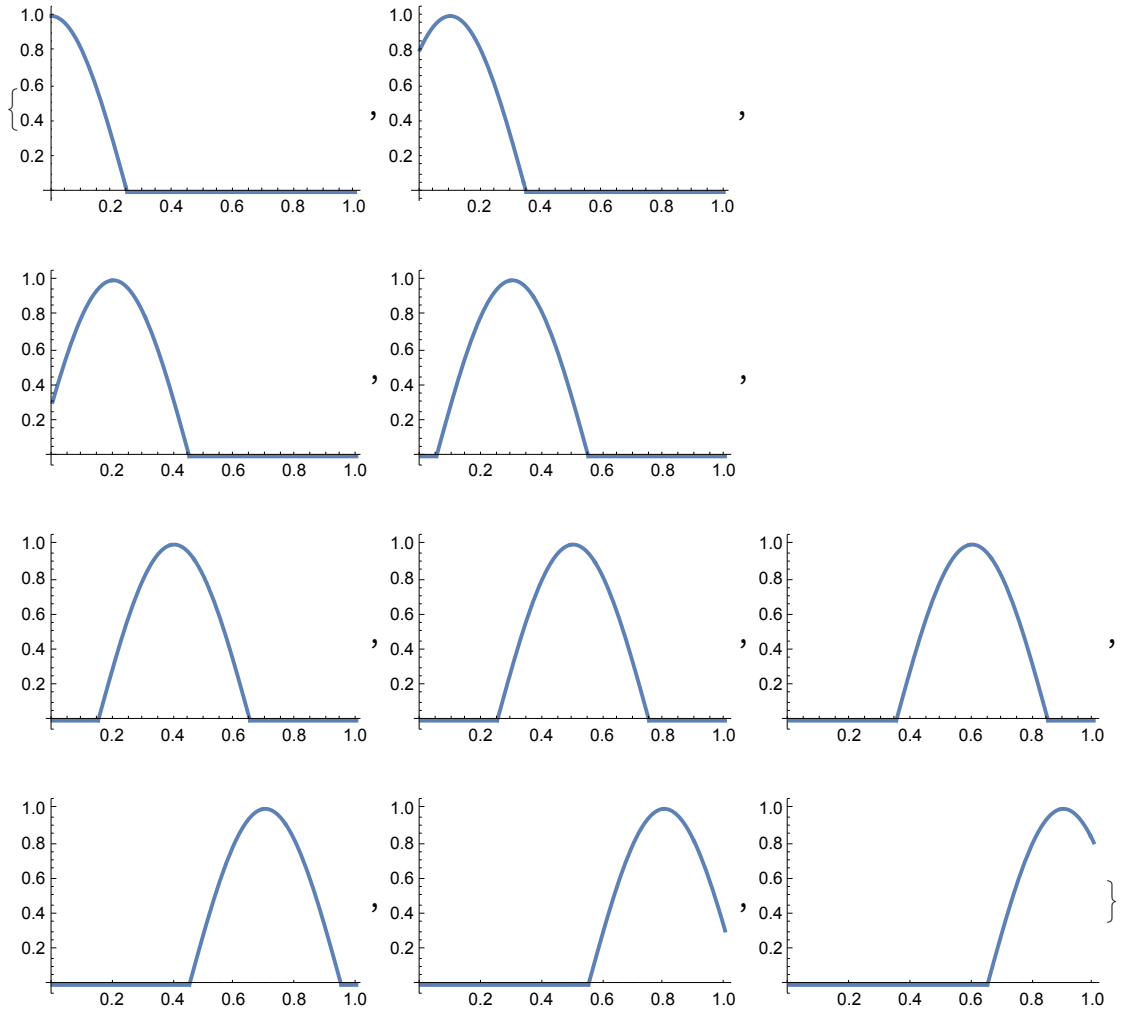
In[12]:=
```
Plot[g1[x], {x, -1, 1}]
```

Out[12]=



In[15]:=
```
Table[Plot[g1[x - 0.1 * (i - 1)], {x, 0, 1}], {i, 10}]
```

Out[15]=



In[19]:=
```
y = Table[Table[g1[x - 0.1 * (i - 1)], {x, 0.1, 1, 0.1}], {i, 10}]
```

Out[19]=
```
{{0.809017, 0.309017, 0, 0, 0, 0, 0, 0, 0, 0},
 {1., 0.809017, 0.309017, 0, 0, 0, 0, 0, 0, 0},
 {0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0, 0, 0},
 {0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0, 0},
 {0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0},
 {0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0},
 {0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0},
 {0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0},
 {0, 0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017},
 {0, 0, 0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017}}
```

In[20]:=
```
Dimensions[y]
```

Out[20]=
```
{10, 10}
```

In[24]:=
```
MatrixForm[y]
```

Out[24]//MatrixForm=

0.809017	0.309017	0	0	0	0	0	0	0	0
1.	0.809017	0.309017	0	0	0	0	0	0	0
0.809017	1.	0.809017	0.309017	0	0	0	0	0	0
0.309017	0.809017	1.	0.809017	0.309017	0	0	0	0	0
0	0.309017	0.809017	1.	0.809017	0.309017	0	0	0	0
0	0	0.309017	0.809017	1.	0.809017	0.309017	0	0	0
0	0	0	0.309017	0.809017	1.	0.809017	0.309017	0	0
0	0	0	0	0.309017	0.809017	1.	0.809017	0.309	0
0	0	0	0	0	0.309017	0.809017	1.	0.809	0
0	0	0	0	0	0	0.309017	0.809017	1.	0

In[22]:=
```
yt = Transpose[y];
```

In[23]:=
```
MatrixForm[yt]
```

Out[23]//MatrixForm=

0.809017	1.	0.809017	0.309017	0	0	0	0	0	0
0.309017	0.809017	1.	0.809017	0.309017	0	0	0	0	0
0	0.309017	0.809017	1.	0.809017	0.309017	0	0	0	0
0	0	0.309017	0.809017	1.	0.809017	0.309017	0	0	0
0	0	0	0.309017	0.809017	1.	0.809017	0.309017	0	0
0	0	0	0	0.309017	0.809017	1.	0.809017	0.309	0
0	0	0	0	0	0.309017	0.809017	1.	0.809	0
0	0	0	0	0	0	0.309017	0.809017	1.	0
0	0	0	0	0	0	0	0.309017	0.809	0
0	0	0	0	0	0	0	0	0.309	0

In[25]:=
```
Export["~/cross_corr_chatgpt/input.csv", yt, "CSV"]
```

Out[25]=
```
~/cross_corr_chatgpt/input.csv
```

In[26]:=
```
a = Import["~/cross_corr_chatgpt/input.csv", "CSV"]
```

Out[26]=
```
{{0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0, 0, 0},
 {0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0, 0},
 {0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0},
 {0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0},
 {0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0},
 {0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0},
 {0, 0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017},
 {0, 0, 0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017},
 {0, 0, 0, 0, 0, 0, 0, 0.309017, 0.809017, 1.},
 {0, 0, 0, 0, 0, 0, 0, 0, 0.309017, 0.809017}}
```

In[27]:=
```
at = Transpose[a]
```

Out[27]=
```
{{0.809017, 0.309017, 0, 0, 0, 0, 0, 0, 0, 0},
 {1., 0.809017, 0.309017, 0, 0, 0, 0, 0, 0, 0},
 {0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0, 0, 0},
 {0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0, 0},
 {0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0, 0},
 {0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0, 0},
 {0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0, 0},
 {0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017, 0},
 {0, 0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017, 0.309017},
 {0, 0, 0, 0, 0, 0, 0.309017, 0.809017, 1., 0.809017}}
```

In[28]:=
```
Table[ListPlot[at[[i]], Joined → True], {i, Length[at]}]
```

Out[28]=