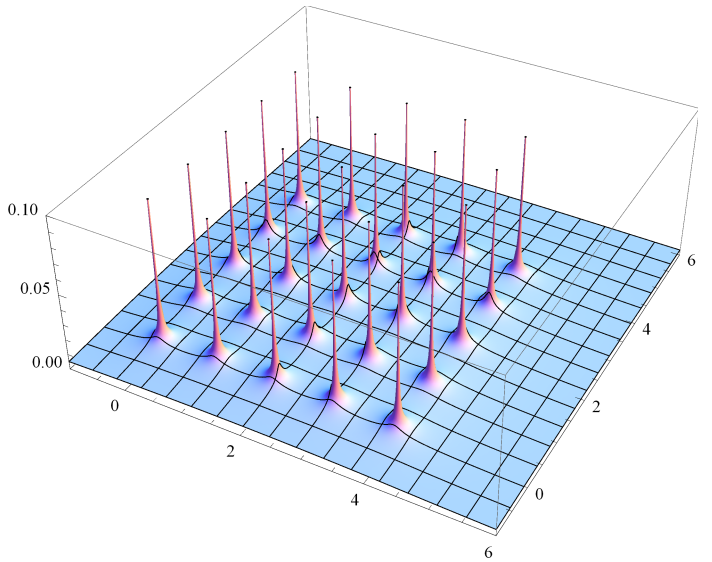
```
(*For Surface charge Distribution*)
(*Potential Functions*)
Pot[Q_, x0_, y0_, z0_] := Q / (4 Pi epsilon Sqrt[(x - x0)^2 + (y - y0)^2 + (z - z0)^2]);
(*Define List of Charges*)
Surfacecharges = Table[{0.01, x, y}, {x, 0, 4}, {y, 0, 4}];
(*Compute Surface Potential*)
SurfacePot = 0;
Do[SurfacePot = SurfacePot + Pot[Surfacecharges[[i, j, 1]],
     Surfacecharges[[i, j, 2]], Surfacecharges[[i, j, 3]], 0], {i, 1, 5}, {j, 1, 5}];
(*Plot3D in xy-plane*)
SurfacePot = SurfacePot /. {epsilon → 1, z → 0}
Plot3D[SurfacePot, {x, -1, 6}, {y, -1, 6},
 PlotRange → {{-1, 6}, {-1, 6}, {0, 0.1}}, PlotPoints → 200]
Needs["VectorAnalysis`"]
(*Electric intensity*)
SurfaceInt = -Grad[SurfacePot, Cartesian[x, y, z]];
SurfaceInt = SurfaceInt /. {epsilon → 1, z → 0}
Needs["VectorFieldPlots`"]
VectorFieldPlot[{SurfaceInt[[1]], SurfaceInt[[2]]},
 {x, -1, 6, 0.11}, {y, -1, 6, 0.11}]
```

$$\frac{0.000795775}{\sqrt{(-4+x)^2+(-4+y)^2}}+\frac{0.000795775}{\sqrt{(-3+x)^2+(-4+y)^2}}+\frac{0.000795775}{\sqrt{(-2+x)^2+(-4+y)^2}}+$$
$$\frac{0.000795775}{\sqrt{(-1+x)^2+(-4+y)^2}}+\frac{0.000795775}{\sqrt{x^2+(-4+y)^2}}+\frac{0.000795775}{\sqrt{(-4+x)^2+(-3+y)^2}}+$$
$$\frac{0.000795775}{\sqrt{(-3+x)^2+(-3+y)^2}}+\frac{0.000795775}{\sqrt{(-2+x)^2+(-3+y)^2}}+\frac{0.000795775}{\sqrt{(-1+x)^2+(-3+y)^2}}+\frac{0.000795775}{\sqrt{x^2+(-3+y)^2}}+$$
$$\frac{0.000795775}{\sqrt{(-4+x)^2+(-2+y)^2}}+\frac{0.000795775}{\sqrt{(-3+x)^2+(-2+y)^2}}+\frac{0.000795775}{\sqrt{(-2+x)^2+(-2+y)^2}}+$$
$$\frac{0.000795775}{\sqrt{(-1+x)^2+(-2+y)^2}}+\frac{0.000795775}{\sqrt{x^2+(-2+y)^2}}+\frac{0.000795775}{\sqrt{(-4+x)^2+(-1+y)^2}}+\frac{0.000795775}{\sqrt{(-3+x)^2+(-1+y)^2}}+$$
$$\frac{0.000795775}{\sqrt{(-2+x)^2+(-1+y)^2}}+\frac{0.000795775}{\sqrt{(-1+x)^2+(-1+y)^2}}+\frac{0.000795775}{\sqrt{x^2+(-1+y)^2}}+\frac{0.000795775}{\sqrt{(-4+x)^2+y^2}}+$$
$$\frac{0.000795775}{\sqrt{(-3+x)^2+y^2}}+\frac{0.000795775}{\sqrt{(-2+x)^2+y^2}}+\frac{0.000795775}{\sqrt{(-1+x)^2+y^2}}+\frac{0.000795775}{\sqrt{x^2+y^2}}$$


0.10
0.05
0.00
0
2
4
6
0
2
4
6

$$\left\{\frac{0.000795775\,(-4+x)}{\left((-4+x)^2+(-4+y)^2\right)^{3/2}}+\frac{0.000795775\,(-3+x)}{\left((-3+x)^2+(-4+y)^2\right)^{3/2}}+\frac{0.000795775\,(-2+x)}{\left((-2+x)^2+(-4+y)^2\right)^{3/2}}+\right.$$
$$\frac{0.000795775\,(-1+x)}{\left((-1+x)^2+(-4+y)^2\right)^{3/2}}+\frac{0.000795775\,x}{\left(x^2+(-4+y)^2\right)^{3/2}}+\frac{0.000795775\,(-4+x)}{\left((-4+x)^2+(-3+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-3+x)}{\left((-3+x)^2+(-3+y)^2\right)^{3/2}}+\frac{0.000795775\,(-2+x)}{\left((-2+x)^2+(-3+y)^2\right)^{3/2}}+\frac{0.000795775\,(-1+x)}{\left((-1+x)^2+(-3+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,x}{\left(x^2+(-3+y)^2\right)^{3/2}}+\frac{0.000795775\,(-4+x)}{\left((-4+x)^2+(-2+y)^2\right)^{3/2}}+\frac{0.000795775\,(-3+x)}{\left((-3+x)^2+(-2+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-2+x)}{\left((-2+x)^2+(-2+y)^2\right)^{3/2}}+\frac{0.000795775\,(-1+x)}{\left((-1+x)^2+(-2+y)^2\right)^{3/2}}+\frac{0.000795775\,x}{\left(x^2+(-2+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-4+x)}{\left((-4+x)^2+(-1+y)^2\right)^{3/2}}+\frac{0.000795775\,(-3+x)}{\left((-3+x)^2+(-1+y)^2\right)^{3/2}}+\frac{0.000795775\,(-2+x)}{\left((-2+x)^2+(-1+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-1+x)}{\left((-1+x)^2+(-1+y)^2\right)^{3/2}}+\frac{0.000795775\,x}{\left(x^2+(-1+y)^2\right)^{3/2}}+\frac{0.000795775\,(-4+x)}{\left((-4+x)^2+y^2\right)^{3/2}}+$$
$$\left.\frac{0.000795775\,(-3+x)}{\left((-3+x)^2+y^2\right)^{3/2}}+\frac{0.000795775\,(-2+x)}{\left((-2+x)^2+y^2\right)^{3/2}}+\frac{0.000795775\,(-1+x)}{\left((-1+x)^2+y^2\right)^{3/2}}+\frac{0.000795775\,x}{\left(x^2+y^2\right)^{3/2}},\right.$$
$$\frac{0.000795775\,(-4+y)}{\left((-4+x)^2+(-4+y)^2\right)^{3/2}}+\frac{0.000795775\,(-4+y)}{\left((-3+x)^2+(-4+y)^2\right)^{3/2}}+\frac{0.000795775\,(-4+y)}{\left((-2+x)^2+(-4+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-4+y)}{\left((-1+x)^2+(-4+y)^2\right)^{3/2}}+\frac{0.000795775\,(-4+y)}{\left(x^2+(-4+y)^2\right)^{3/2}}+\frac{0.000795775\,(-3+y)}{\left((-4+x)^2+(-3+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-3+y)}{\left((-3+x)^2+(-3+y)^2\right)^{3/2}}+\frac{0.000795775\,(-3+y)}{\left((-2+x)^2+(-3+y)^2\right)^{3/2}}+\frac{0.000795775\,(-3+y)}{\left((-1+x)^2+(-3+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-3+y)}{\left(x^2+(-3+y)^2\right)^{3/2}}+\frac{0.000795775\,(-2+y)}{\left((-4+x)^2+(-2+y)^2\right)^{3/2}}+\frac{0.000795775\,(-2+y)}{\left((-3+x)^2+(-2+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-2+y)}{\left((-2+x)^2+(-2+y)^2\right)^{3/2}}+\frac{0.000795775\,(-2+y)}{\left((-1+x)^2+(-2+y)^2\right)^{3/2}}+\frac{0.000795775\,(-2+y)}{\left(x^2+(-2+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-1+y)}{\left((-4+x)^2+(-1+y)^2\right)^{3/2}}+\frac{0.000795775\,(-1+y)}{\left((-3+x)^2+(-1+y)^2\right)^{3/2}}+\frac{0.000795775\,(-1+y)}{\left((-2+x)^2+(-1+y)^2\right)^{3/2}}+$$
$$\frac{0.000795775\,(-1+y)}{\left((-1+x)^2+(-1+y)^2\right)^{3/2}}+\frac{0.000795775\,(-1+y)}{\left(x^2+(-1+y)^2\right)^{3/2}}+\frac{0.000795775\,y}{\left((-4+x)^2+y^2\right)^{3/2}}+$$
$$\left.\frac{0.000795775\,y}{\left((-3+x)^2+y^2\right)^{3/2}}+\frac{0.000795775\,y}{\left((-2+x)^2+y^2\right)^{3/2}}+\frac{0.000795775\,y}{\left((-1+x)^2+y^2\right)^{3/2}}+\frac{0.000795775\,y}{\left(x^2+y^2\right)^{3/2}},\ 0\right\}$$