Code:-

```
N=10;
diagonal = -2*ones(N,1);
off_diagonal = ones(N-1,1);
A=diag(diagonal)+diag(off_diagonal,1)+diag(off_diagonal,-1);
eigenvalues=eig(A);
disp(eigenvalues);
```

Result:-

```
>> LAB4

N =

    10

   -3.9190
   -3.6825
   -3.3097
   -2.8308
   -2.2846
   -1.7154
   -1.1692
   -0.6903
   -0.3175
   -0.0810
```