```
#include <iostream>
using namespace std;
long\ long\ n,z,a[10001],m,i,b[1001][1001],c,j,k,o=1,S,d[1001][1001];
int main()
{
  cin>>n;
  while (cin>>z)
    a[++m]=z;
  for (i=1;i<=n;i++)
    for (j=1;j<=n;j++)
    b[i][j]=o,o++;
  o=1;
  for (i=1;i<=n;i++)
    for (j=1;j<=n;j++)
    d[i][j]=o,o++;
  for (k=1;k<=m;k++)
  {
    for (i=1;i<=n;i++)
      for (j=1;j<=n;j++)
       {
         if (b[i][j]==a[k] and k%2)
         b[i][j]=-1;
         else
         if (b[i][j]==a[k] and k%2==0)
         b[i][j]=-2;
         else
         if (d[i][j]==a[k] and b[i][j]<0)
           b[i][j]=d[i][j];
```

```
if ([b[i][j]==-1 \text{ and } b[i+1][j]==-1 \text{ and } b[i-1][j-1]==-1 \text{ and } b[i-1][j+1]==-1) or ([b[i][j]==-2 \text{ and } b[i-1][j+1]==-1)
b[i+1][j]==-2 and b[i-1][j-1]==-2 and b[i-1][j+1]==-2))
                                       S=d[i][j]+d[i+1][j]+d[i-1][j-1]+d[i-1][j+1];
                                        cout<<S;
                                       return 0;
                               }
                               else
                                if \ ((b[i][j] == -1 \ and \ b[i-1][j] == -1 \ and \ b[i-2][j-1] == -1 \ and \ b[i-2][j+1] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j] == -1 \ an
1][j]==-2 and b[i-2][j-1]==-2 and b[i-2][j+1]==-2))
                                       S=d[i][j]+d[i-1][j]+d[i-2][j-1]+d[i-2][j+1];
                                       cout<<S;
                                       return 0;
                               }
                                else
                                if ((b[i][j]==-1 \text{ and } b[i+1][j+1]==-1 \text{ and } b[i][j+2]==-1 \text{ and } b[i+2][j+1]==-1) or (b[i][j]==-2 \text{ and } b[i+2][j+1]==-1)
b[i+1][j+1]==-2 and b[i][j+2]==-2 and b[i+2][j+1]==-2)
                                       S=d[i][j]+d[i+1][j+1]+d[i][j+2]+d[i+2][j+1];
                                       cout<<S;
                                       return 0;
                               }
                                else
                                if ((b[i][j]=-1 \text{ and } b[i+1][j-1]=-1 \text{ and } b[i+2][j-1]=-1 \text{ and } b[i][j-2]=-1) or (b[i][j]=-2 \text{ and } b[i+1][j-1]=-1 \text{ and } b[i+1][j-1]=-1
b[i+1][j-1]==-2 and b[i+2][j-1]==-2 and b[i][j-2]==-2))
                                        S=d[i][j]+d[i+1][j-1]+d[i+2][j-1]+d[i][j-2];
                                       cout<<S;
                                        return 0;
```

```
}
                                else
                                if ((b[i][j]==-1 \text{ and } b[i+1][j+1]==-1 \text{ and } b[i+1][j+2]==-1 \text{ and } b[i+2][j]==-1) or (b[i][j]==-2 \text{ and } b[i+1][j+1]==-1 \text{ and } b[i+1][j+1]==-1
b[i+1][j+1]=-2 and b[i+1][j+2]=-2 and b[i+2][j]=-2)
                                        S=d[i][j]+d[i+1][j+1]+d[i+1][j+2]+d[i+2][j];
                                        cout<<S;
                                        return 0;
                                 else
                                 if ((b[i][j] == -1 \ and \ b[i-2][j] == -1 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ and \ b[i-1][j+2] == -1) \ or \ (b[i][j] == -2 \ and \ b[i-1][j+1] == -1 \ a
2][j]==-2 and b[i-1][j+1]==-2 and b[i-1][j+2]==-2))
                                         S=d[i][j]+d[i-2][j]+d[i-1][j+1]+d[i-1][j+2];
                                        cout<<S;
                                        return 0;
                                }
                                 else
                                 if ((b[i][j]=-1 \text{ and } b[i-1][j-1]=-1 \text{ and } b[i+1][j-1]=-1 \text{ and } b[i][j+1]=-1) or (b[i][j]=-2 \text{ and } b[i-1][j-1]=-1 \text{ and } b[i-1][j-1]=-1
1]==-2 and b[i+1][j-1]==-2 and b[i][j+1]==-2))
                                        S=d[i][j]+d[i-1][j-1]+d[i+1][j-1]+d[i][j+1];
                                        cout<<S;
                                        return 0;
                                }
                                 else
                                 if ((b[i][j]==-1 \text{ and } b[i-2][j-1]==-1 \text{ and } b[i+1][j-2]==-1 \text{ and } b[i][j-1]==-1) or (b[i][j]==-2 \text{ and } b[i-2][j-1]==-1 \text{ and } b[i-2][j-1]==-1
1]==-2 and b[i+1][j-2]==-2 and b[i][j-1]==-2))
                                {
                                        S=d[i][j]+d[i-2][j-1]+d[i+1][j-2]+d[i][j-1];
```

```
cout<<S;
              return 0;
           else
           if ((b[i][j]==-1 \text{ and } b[i][j+1]==-1 \text{ and } b[i-1][j+2]==-1 \text{ and } b[i+1][j+2]==-1) or (b[i][j]==-2 \text{ and } b[i-1][j+2]==-1)
b[i][j+1]=-2 and b[i-1][j+2]=-2 and b[i+1][j+2]=-2)
              S=d[i][j]+d[i][j+1]+d[i-1][j+2]+d[i+1][j+2];
              cout<<S;
              return 0;
           }
           else
           if ((b[i][j]==-1 \text{ and } b[i][j-1]==-1 \text{ and } b[i-1][j+1]==-1 \text{ and } b[i+1][j+1]==-1) or (b[i][j]==-2 \text{ and } b[i][j-1]==-1 \text{ and } b[i-1][j+1]==-1
1]==-2 and b[i-1][j+1]==-2 and b[i+1][j+1]==-2))
              S=d[i][j]+d[i][j-1]+d[i-1][j+1]+d[i+1][j+1];
              cout<<S;
              return 0;
           }
           else
           if ((b[i][j]=-1 \text{ and } b[i+2][j]=-1 \text{ and } b[i+1][j-1]=-1 \text{ and } b[i+1][j-2]=-1) or (b[i][j]=-2 \text{ and } b[i+1][j-2]=-1)
b[i+2][j]==-2 and b[i+1][j-1]==-2 and b[i+1][j-2]==-2))
           {
              S=d[i][j]+d[i+2][j]+d[i+1][j-1]+d[i+1][j-2];
              cout<<S;
              return 0;
           }
           else
           if ((b[i][j]==-1 and b[i-2][j]==-1 and b[i-1][j-1]==-1 and b[i-1][j-2]==-1) or (b[i][j]==-2 and b[i-1][j-2]==-1)
2][j]==-2 and b[i-1][j-1]==-2 and b[i-1][j-2]==-2))
```

```
S=d[i][j]+d[i-2][j]+d[i-1][j-1]+d[i-1][j-2];
                                                cout<<S;
                                                return 0;
                                       }
                                       else
                                       if ((b[i][j]==-1 \text{ and } b[i+1][j]==-1 \text{ and } b[i+2][j-1]==-1 \text{ and } b[i+2][j+1]==-1) or (b[i][j]==-2 \text{ and } b[i+2][j+1]==-1)
b[i+1][j]==-2 and b[i+2][j-1]==-2 and b[i+2][j+1]==-2))
                                                S=d[i][j]+d[i+1][j]+d[i+2][j-1]+d[i+2][j+1];
                                                cout<<S;
                                                return 0;
                                       }
                                       else
                                       if ((b[i][j]==-1 \text{ and } b[i-1][j]==-1 \text{ and } b[i+1][j-1]==-1 \text{ and } b[i+1][j+1]==-1) or (b[i][j]==-2 \text{ and } b[i-1][j]==-2 \text{ 
1][j]==-2 and b[i+1][j-1]==-2 and b[i+1][j+1]==-2))
                                       {
                                                S=d[i][j]+d[i-1][j]+d[i+1][j-1]+d[i+1][j+1];
                                                cout<<S;
                                                 return 0;
                                       }
                                       else
                                       if ((b[i][j]=-1 \text{ and } b[i-1][j+1]=-1 \text{ and } b[i][j+2]=-1 \text{ and } b[i-2][j+1]=-1) or (b[i][j]=-2 \text{ and } b[i-1][j+1]=-1)
1][j+1]==-2 and b[i][j+2]==-2 and b[i-2][j+1]==-2))
                                       {
                                                S=d[i][j]+d[i-1][j+1]+d[i][j+2]+d[i-2][j+1];
                                                cout<<S;
                                                return 0;
                                       }
                                       else
```

```
if ((b[i][j]==-1 and b[i-1][j-1]==-1 and b[i][j-2]==-1 and b[i-2][j-1]==-1) or (b[i][j]==-2 and b[i-1][j-1]==-2))

{
        S=d[i][j]+d[i-1][j-1]+d[i][j-2]+d[i-2][j-1];
        cout<<S;
        return 0;
        }
    }
    cout<<S;
    return 0;
}</pre>
```