Week 4 Programming Assignment

Question 1

```
r = int(input())
c = int(input())

mat = []
# Take matrix input
for i in range(r):
  temp = input()
  l = temp.split()
  row = []
  for j in l:
      row.append(eval(j))
  mat.append(row)

ans = 0
col = 0
for i in range(r):
    mini = min(mat[i])
    r_idx_mini = mat[i].index(mini)
    temp_col = []
    for j in range(c):
        temp_col.append(mat[j][r_idx_mini])
    maxi = max(temp_col)
    if(mini == maxi):
        ans = 1

print(ans)
```

Question 2:

```
r = int(input())
c = int(input())

mat = []
# Take matrix input
for i in range(r):
  temp = input()
  l = temp.split()
  row = []
  for j in l:
      row.append(eval(j))
  mat.append(row)

s = int(input())

# Print Matrix
for j in range(c):
    for i in range(r):
        if i < r-1:
            print(s*mat[i][j], end=" ")
```

```
        else:
            print(s*mat[i][j], end="")
    print()
```

Question 3:

```
n = int(input())

mat = []
# Take matrix input
for i in range(n):
  temp = input()
  l = temp.split()
  row = []
  for j in l:
      row.append(eval(j))
  mat.append(row)


def skew_sym(mat, n):
    flag = 1
    for i in range(n):
        for j in range(n):
            if i != j and mat[i][j] != (mat[j][i]*(-1)):
                flag = 0
                return flag
    return flag

print(skew_sym(mat,n))
```