## horizontal line

**Grand Temple**

# **Problem Statements :**

A religious king wants to build the largest temple in his kingdom . To build the largest temple he needs to find the area of the largest suitable land . Given co-ordinates which denotes rivers flowing through the point horizontally as well as vertically , find the largest area possible to make the grand temple

# **Input Format :**

An integer n denoting number of co-ordinates followed by n co-ordinates

# **Constraints :**

1 <= N <= 10^5  
| Ai | <= 10^9

# **Output Format :**

Largest possible area to build the grand temple

# **Sample Input :**

3  
1 1  
2 4  
5 2

**Sample Output :**

2

**Explanation :**

Area between (2,2) , (2,4) , (5,2) , (5,4)

**Time Limit :**

1 sec