import java.util.Scanner;  
  
public class kruskal{  
   
 public static void main(String[] args){  
   
 Scanner scan = new Scanner(System.in);  
 int[][] matrix = new int[5][5];  
 int[] parent = new int[5];  
 int min;  
 int u = 0;   
 int v = 0;  
 int noOfEdges = 1;  
 int total = 0;  
   
 for(int i = 0; i < 5; i++)

{  
   
 parent[i] = 0;  
   
 for(int j = 0; j < 5; j++)

{  
   
 matrix[i][j] = scan.nextInt();  
 if(matrix[i][j]==0)

{  
 matrix[i][j] = 999;  
 }  
   
}

}  
   
 while(noOfEdges < 5)

{  
   
 min = 999;  
   
 for(int i = 0; i < 5; i++)

{  
   
 for(int j = 0; j < 5; j++)

{  
   
 if(matrix[i][j] < min)

{  
 min = matrix[i][j];  
 u = i;  
 v = j;  
   
 }  
 }  
 }  
 while(parent[u]!=0)

{  
 u = parent[u];  
 }  
 while(parent[v]!=0)

{  
 v = parent[v];  
 }  
   
 if(v!=u)

{  
 noOfEdges++;  
 System.out.println("Edge Found: " + u + "->" + v+" Min : " + min);  
 total+=min;  
 parent[v] = u;  
 }  
 matrix[u][v] = 999;  
 matrix[v][u] = 999;

}

System.out.println("The weight of the minimum spanning tree is "+total);  
   
 }  
   
}