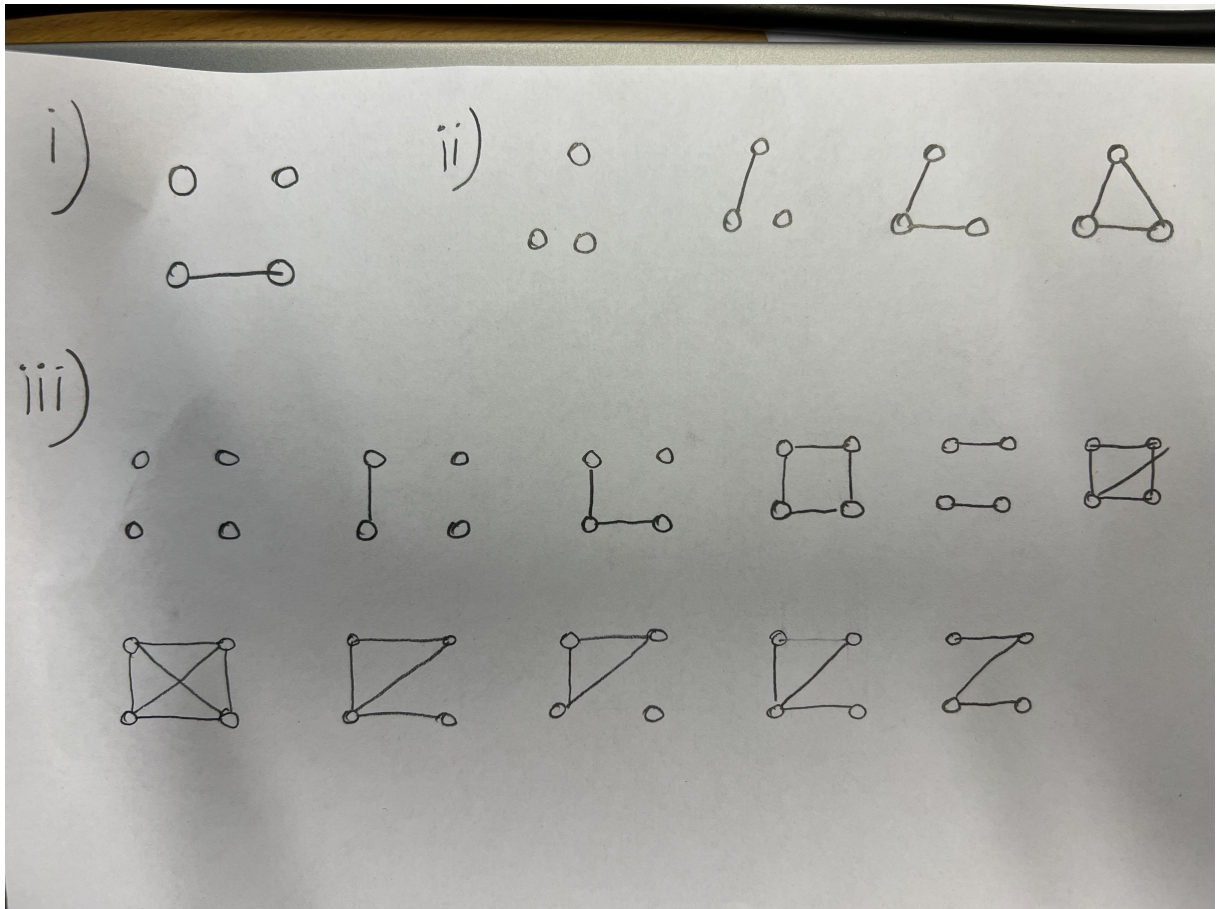


Heimadæmi 9

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Verkefni 1



- a) 2 leiðir
- b) 4 leiðir
- c) 11 leiðir

Verkefni 2

```
public void addEdge(int v, int w) {  
    validateVertex(v);  
    validateVertex(w);  
    if (v == w){
```

```

        throw new IllegalArgumentException("You're trying to connect " + v + " to itself");
    }
    for (int neighbor: adj(v)) {
        if (neighbor == w) {
            throw new IllegalArgumentException(v + " is already connected to " + w);
        }
    }
    E++;
    adj[v].add(w);
    adj[w].add(v);
}

```

```

Exception in thread "main" java.lang.IllegalArgumentException: 1 is already connected to 0
    at Graph.addEdge(Graph.java:199)
    at Graph.<init>(Graph.java:122)
    at Graph.main(Graph.java:261)

```

Verkefni 3

P, N, O, S, M, R, Y, V, X, W, Z, U, Q, T

Verkefni 4

```

public int noTriangle(){
    int counter = 0;
    for (int u = 0; u<V; u++){
        for (int v : adj[u]) {
            for (int w : adj[v]) {
                if (!hasEdge(u, w)) counter +=1;
            }
        }
    }
    return counter;
}

```

```

at Graph.main(Graph.java:261)
magnusde93@askja-dw188 ~/University-Assignments/Semester-2/Computer-Science-2 [main] java-args4 Digraph
37
magnusde93@askja-dw188 ~/University-Assignments/Semester-2/Computer-Science-2 [main]

```