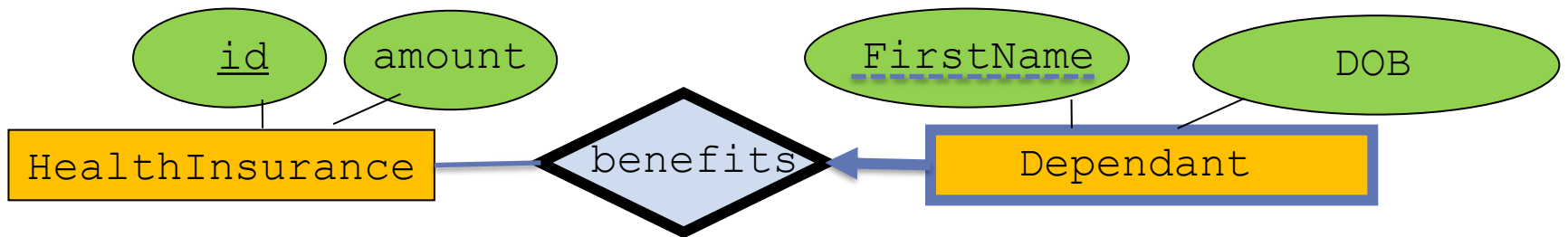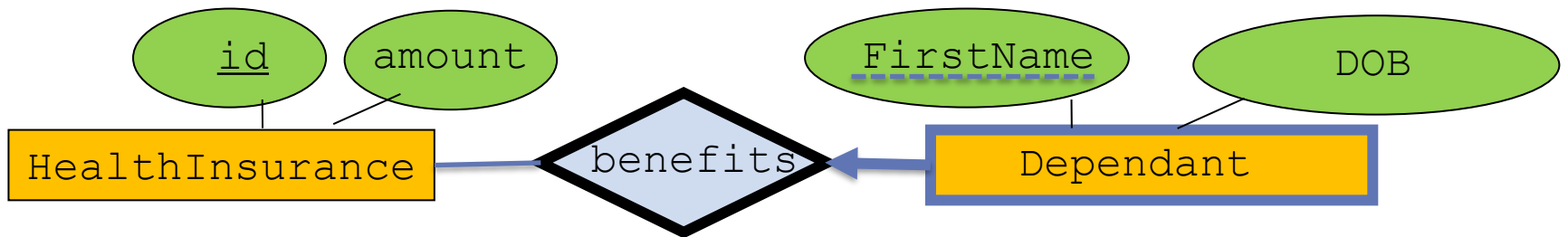# Entity-Relationship Model Supplemental Notes

Weak Entities
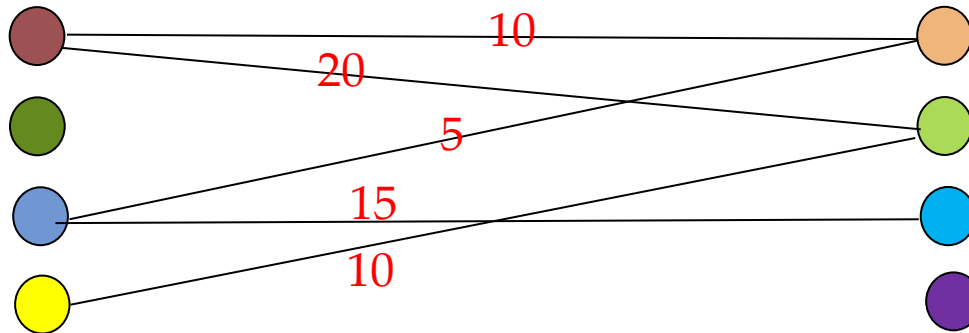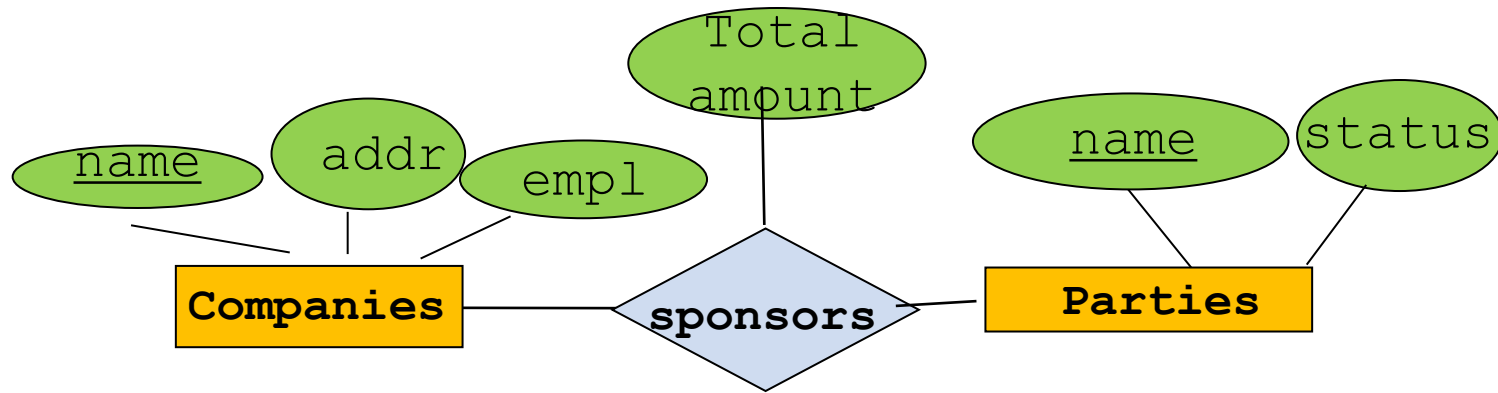

Correct or incorrect?

Weak Entities

Correct

Many - Many

Correct or incorrect?

Many - Many

Correct

Many - Many

Correct or incorrect?

Many - Many

Incorrect

Are involved twice in the same relationship
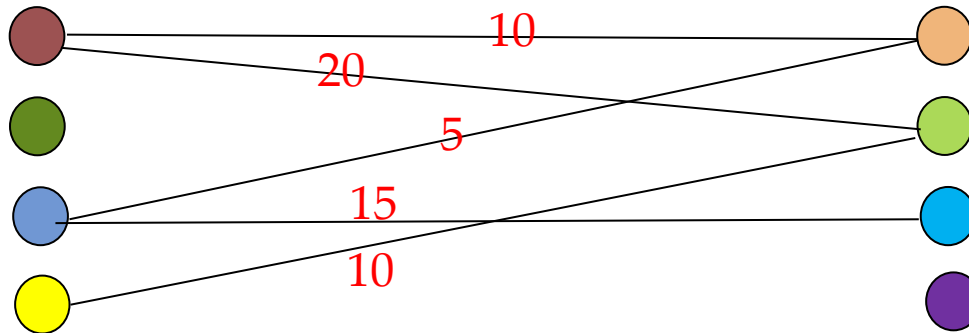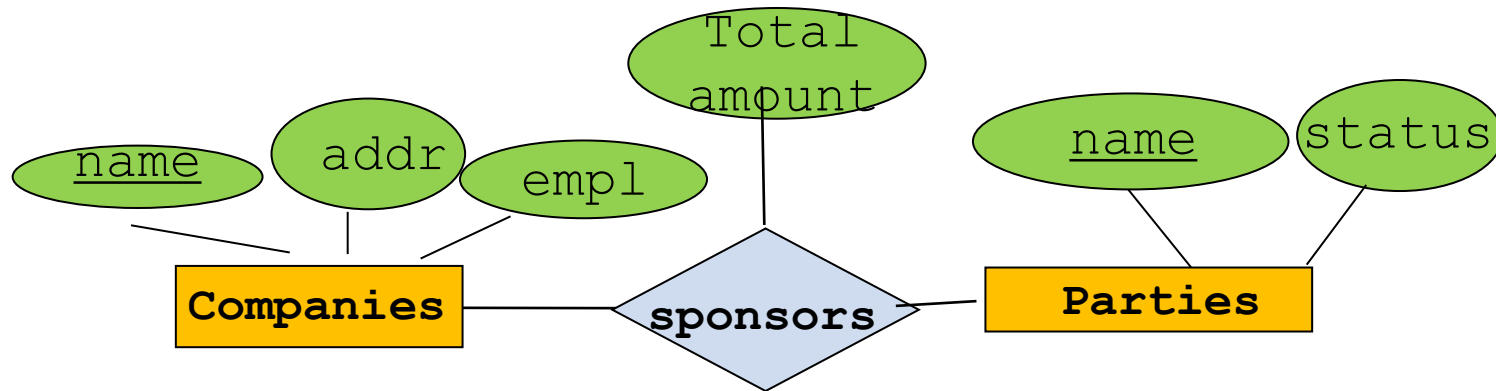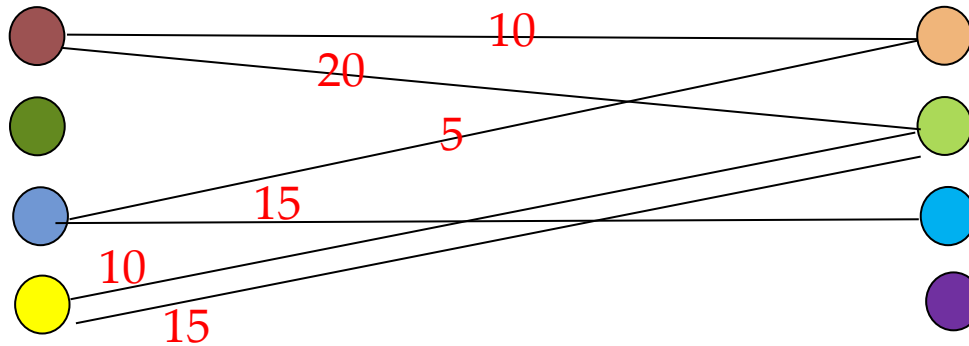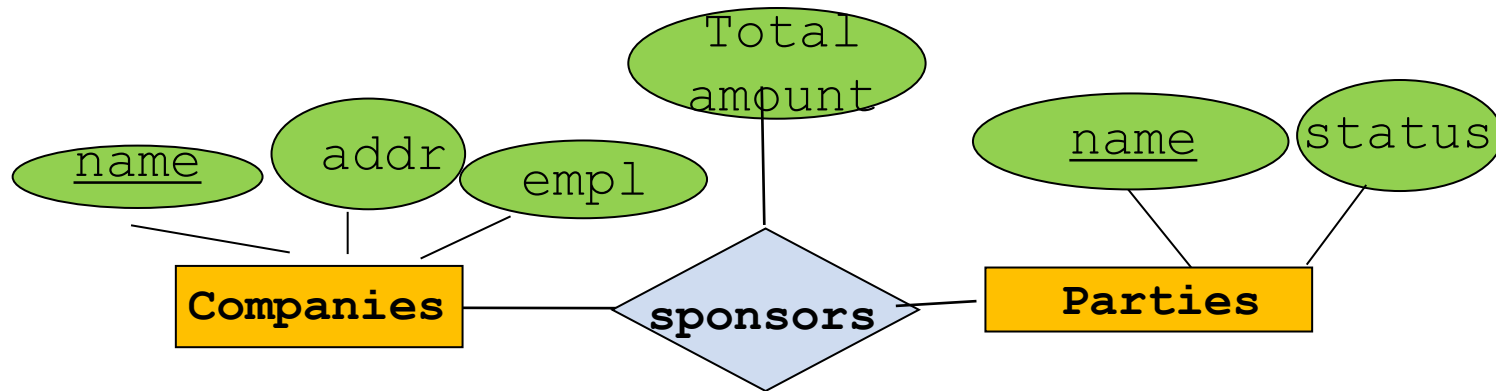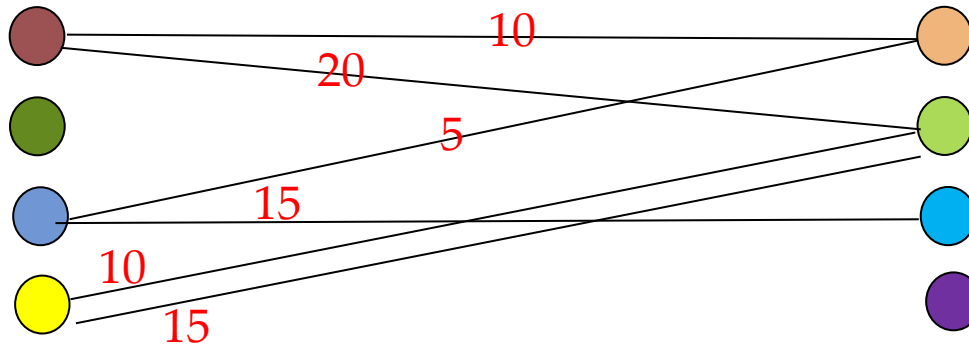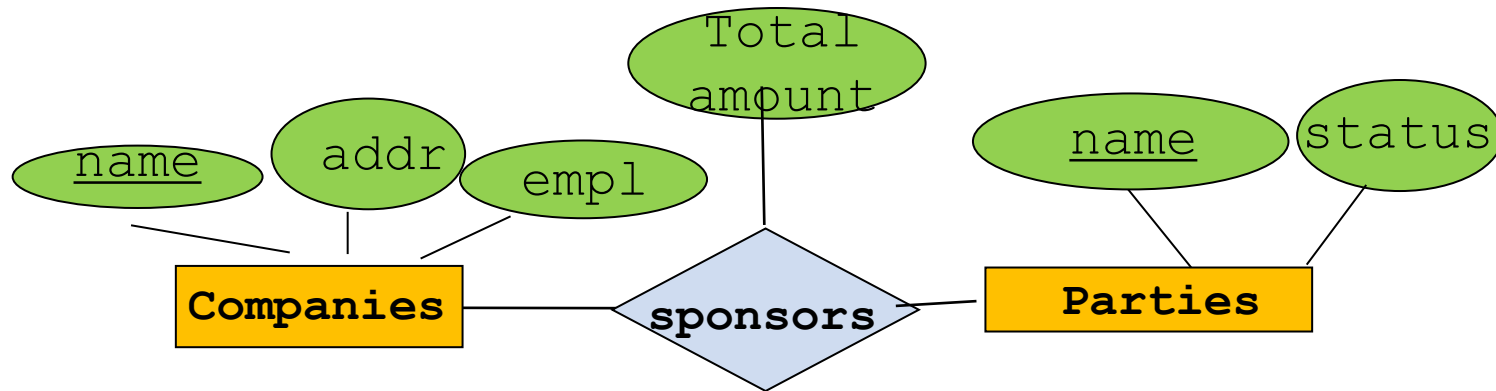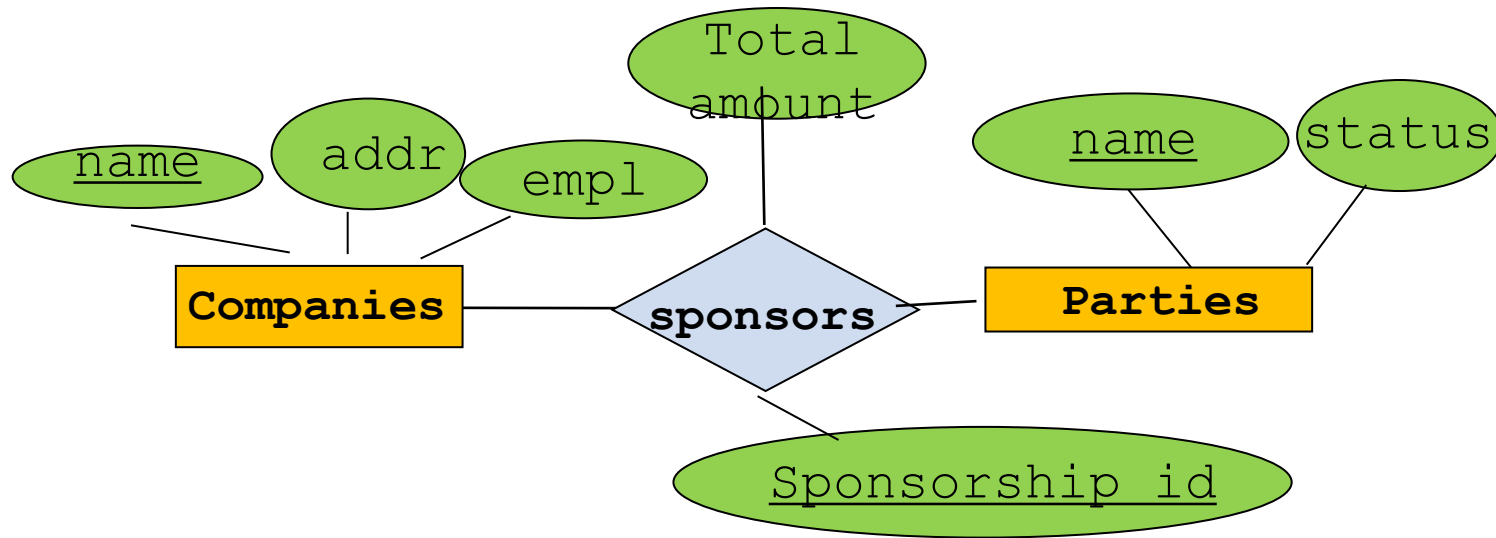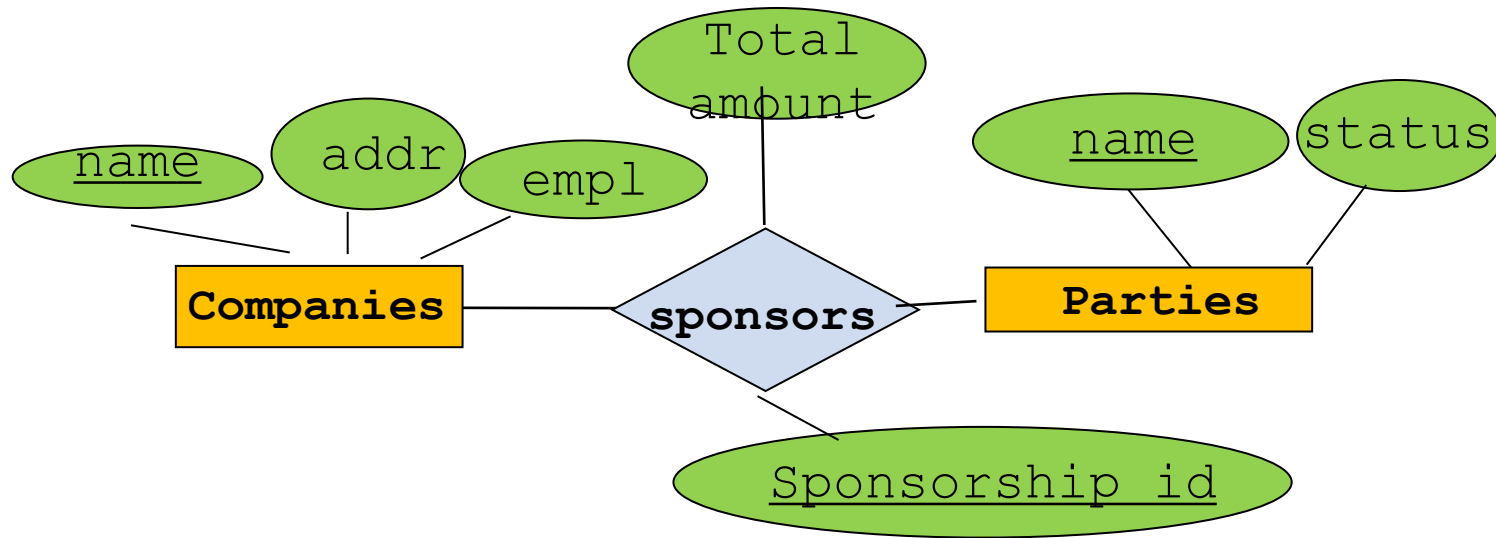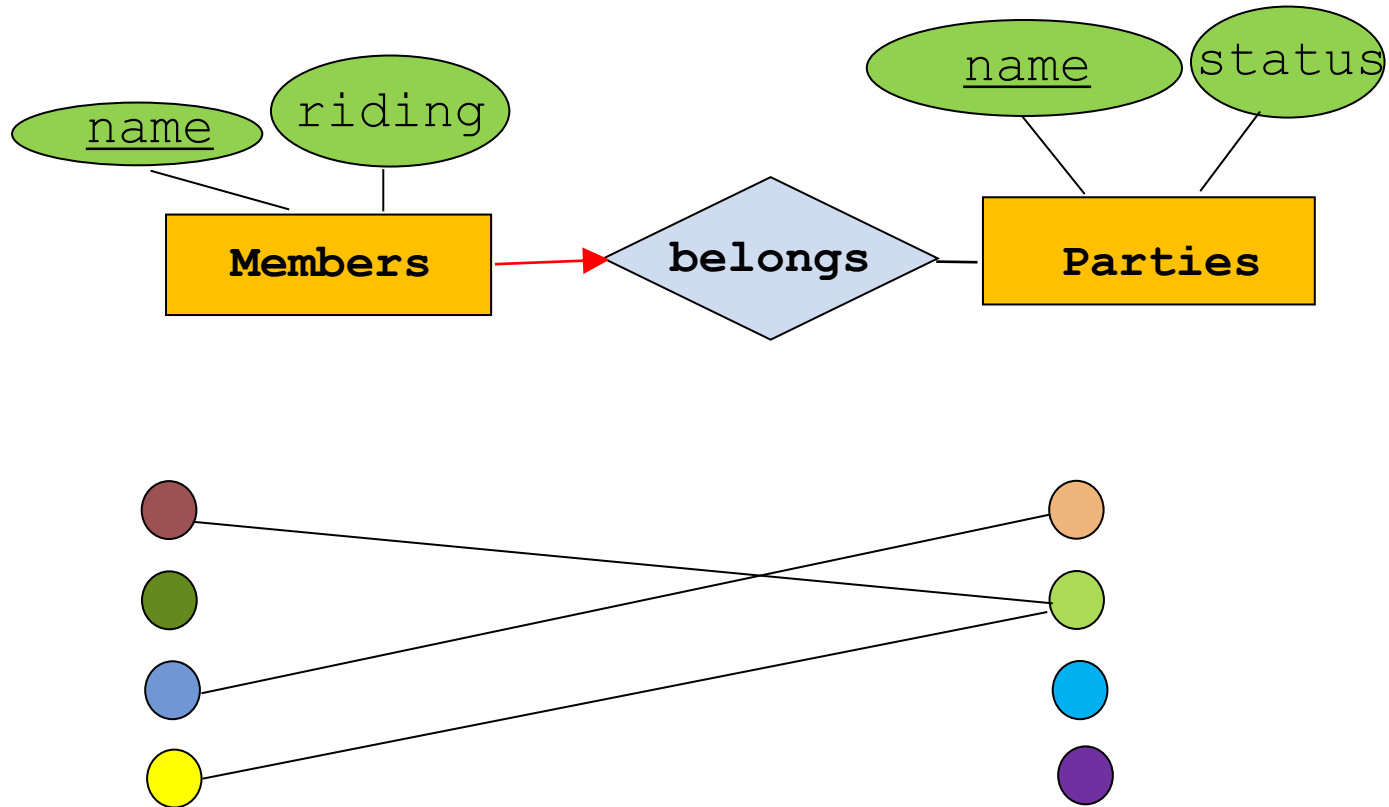
Many - Many

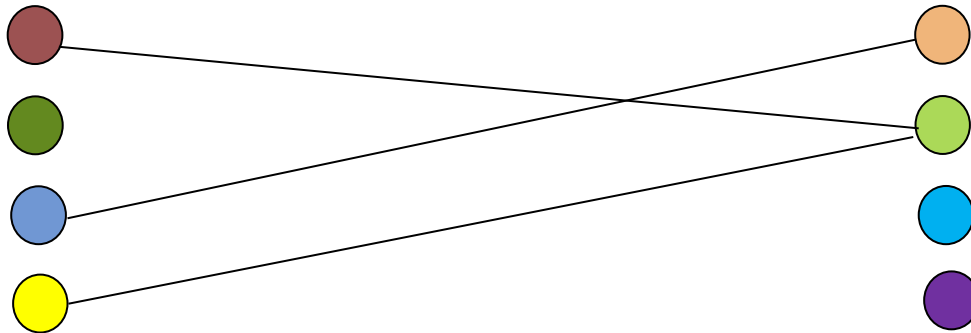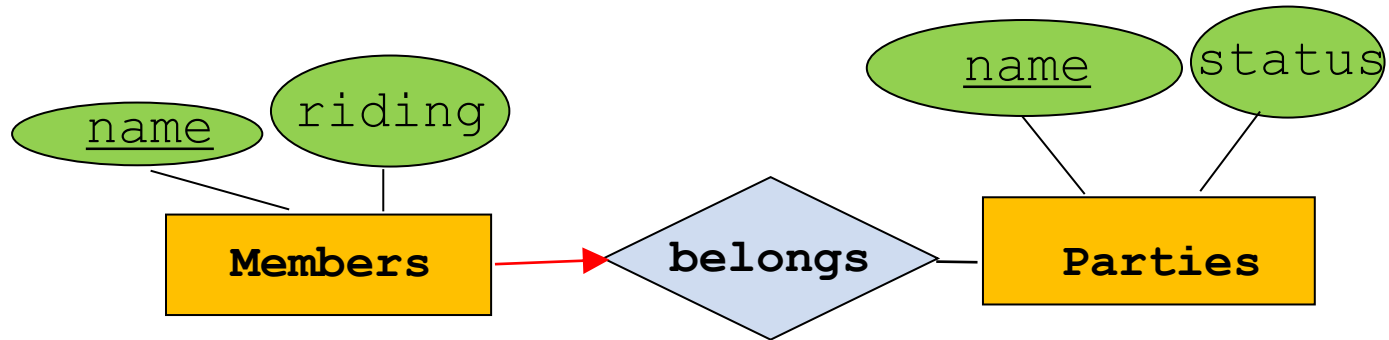Correct or incorrect?

Many - Many

Incorrect

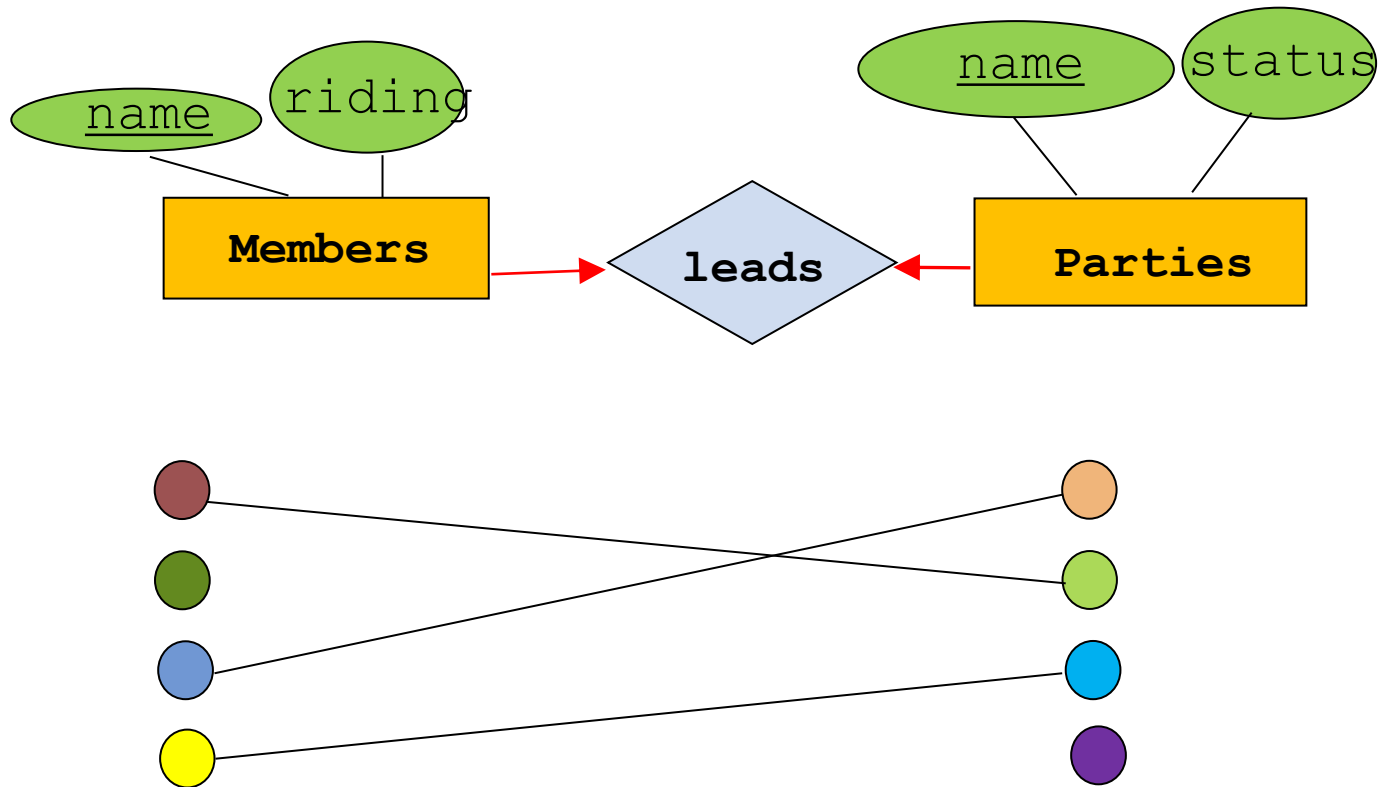Relationships cannot have keys

Key-constraints: one-many, many-one

Correct or incorrect?
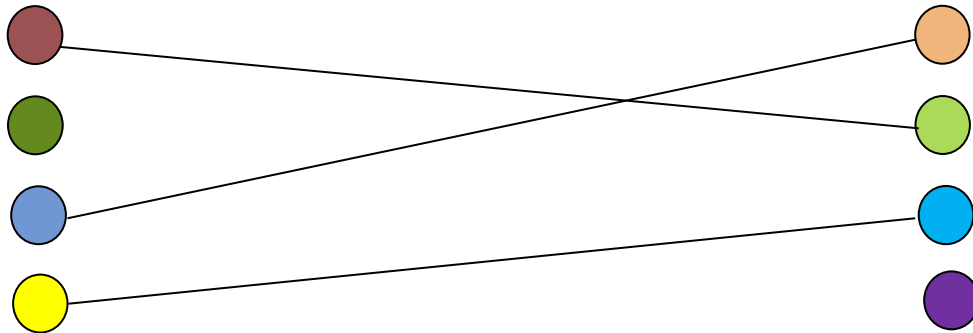
Key-constraints: one-many, many-one
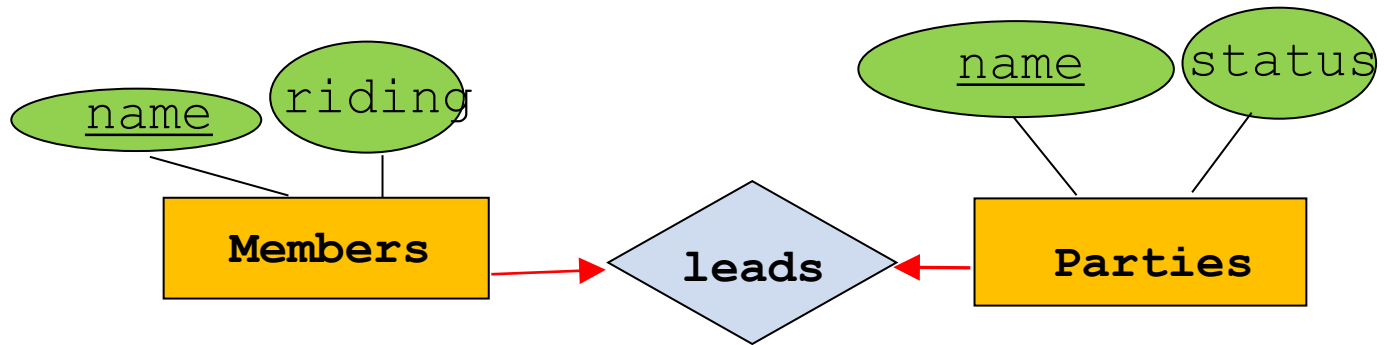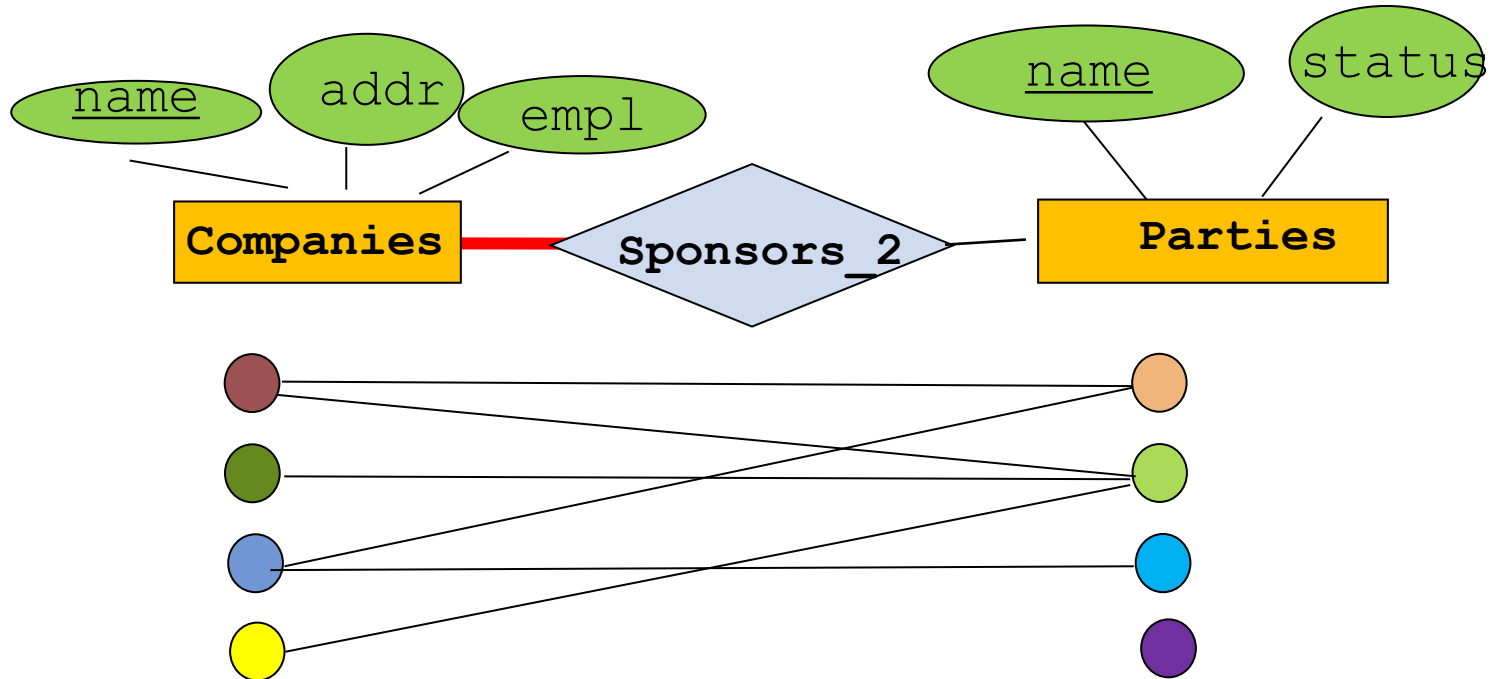

Correct

one-one

Correct or incorrect?

one-one

Correct

Participation Constraints

Correct or incorrect?

Participation Constraints

Correct

All entities in Companies are participating in the relationship. There is not participation constraint on Parties. Hence ● need not participate in the relationship.
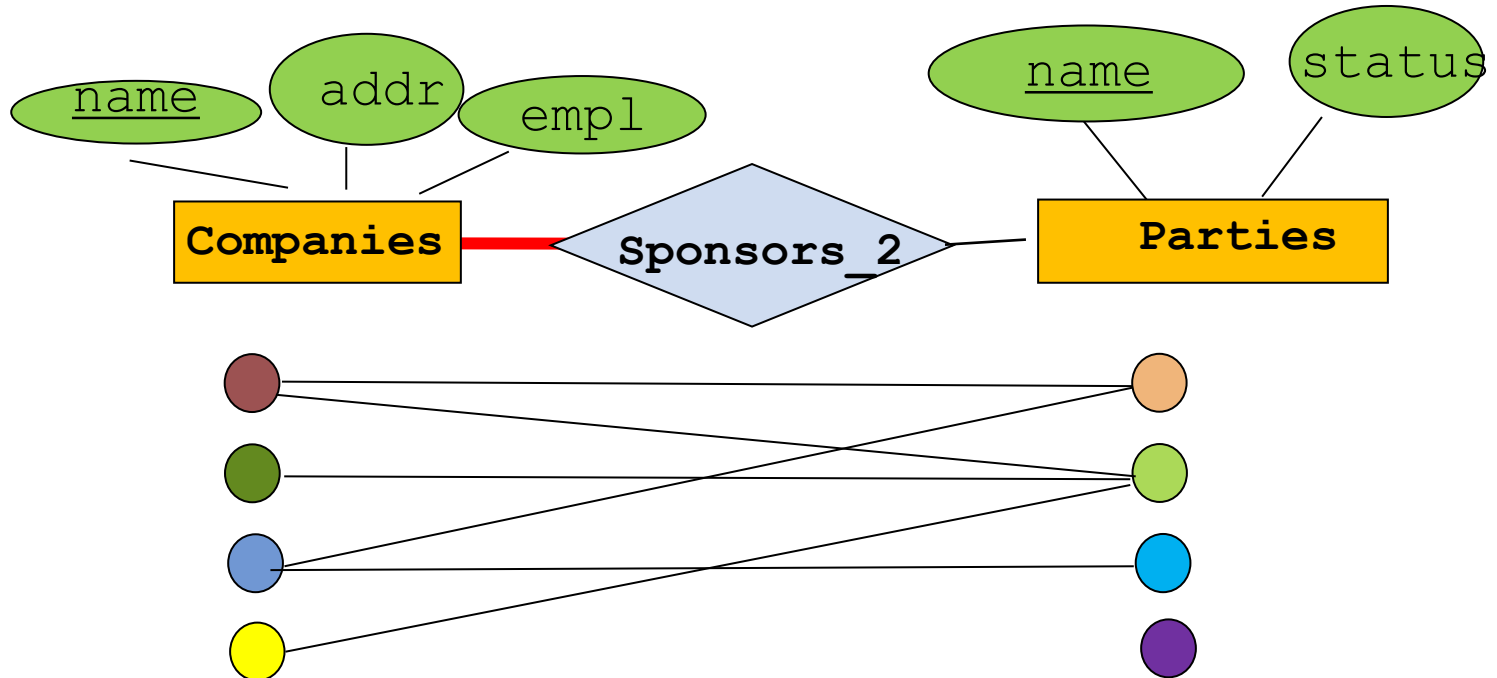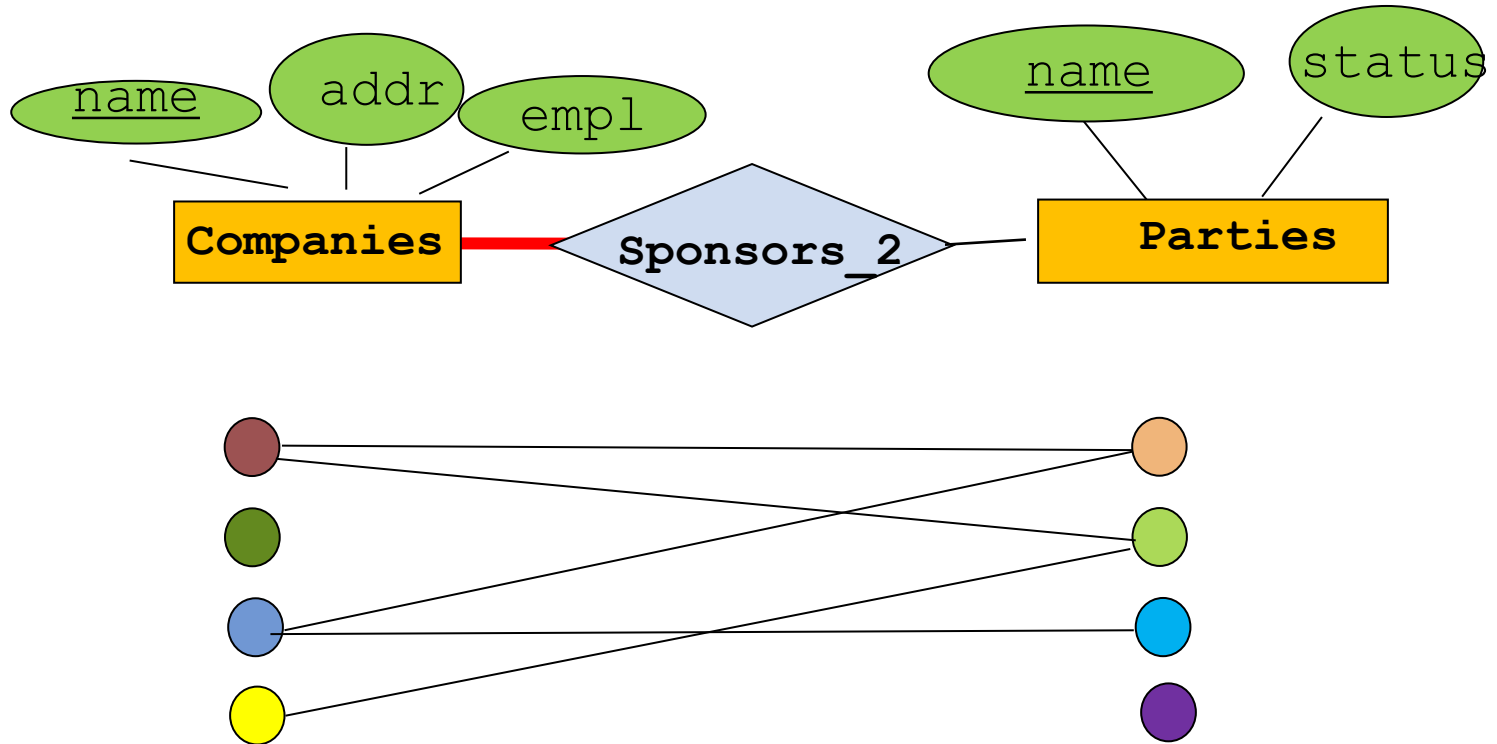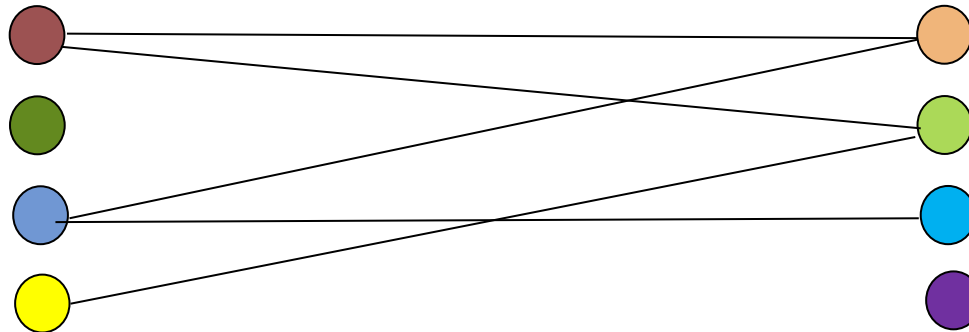
Participation Constraints

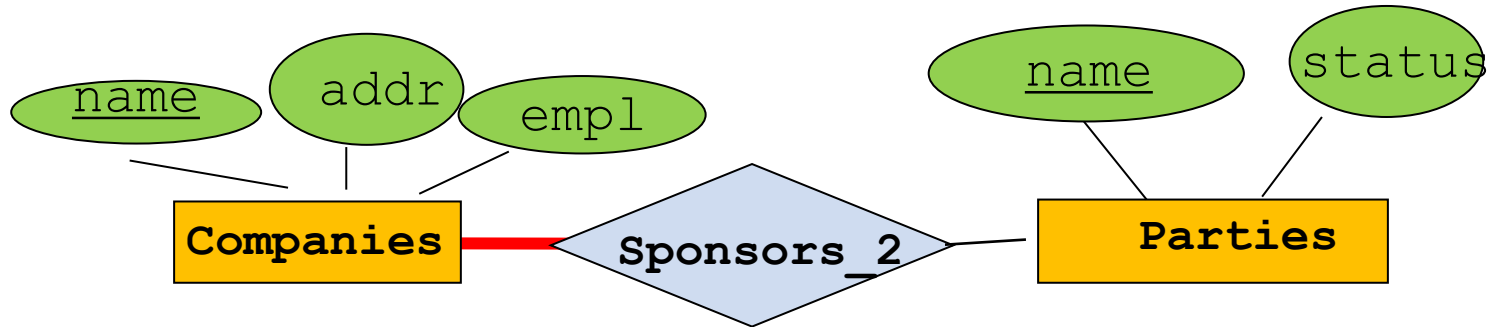Correct or incorrect?

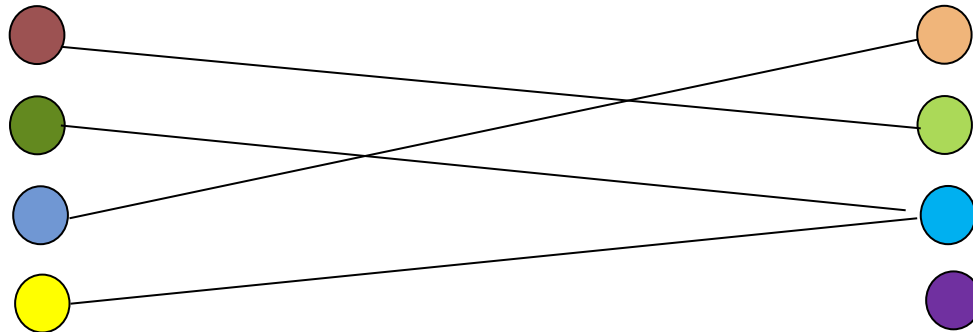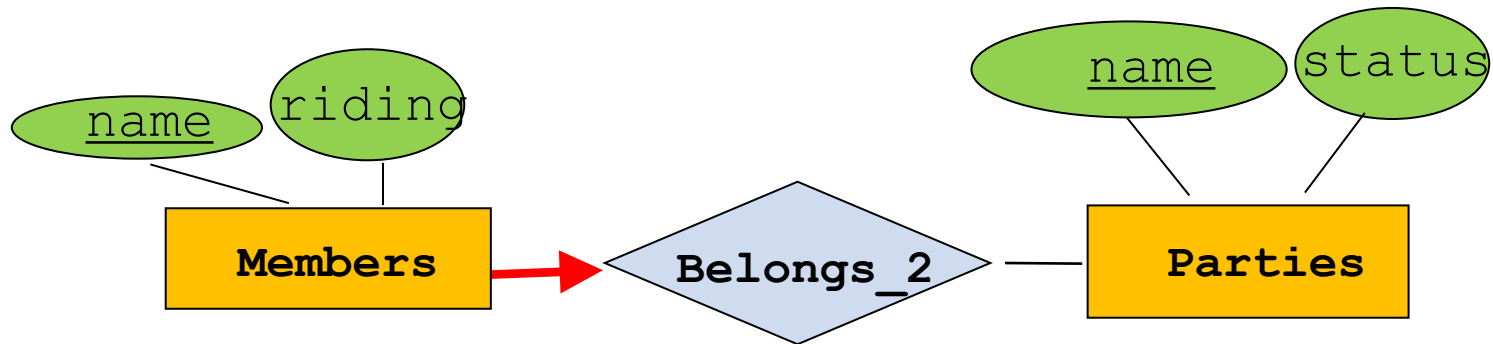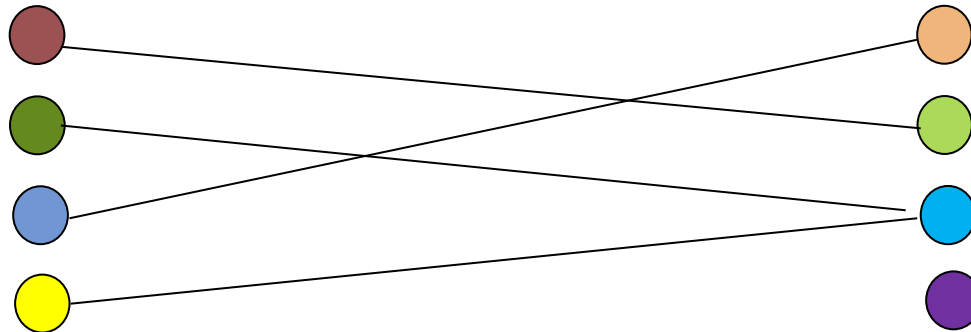# Participation Constraints

Incorrect

Is not participating in the relationship

Key+Participation Constraints

Correct or incorrect?

Key+Participation Constraints

Correct

All entities in Members have exactly 1 involvement in the relationship

Key+Participation Constraints

Correct or incorrect?

Key+Participation Constraints
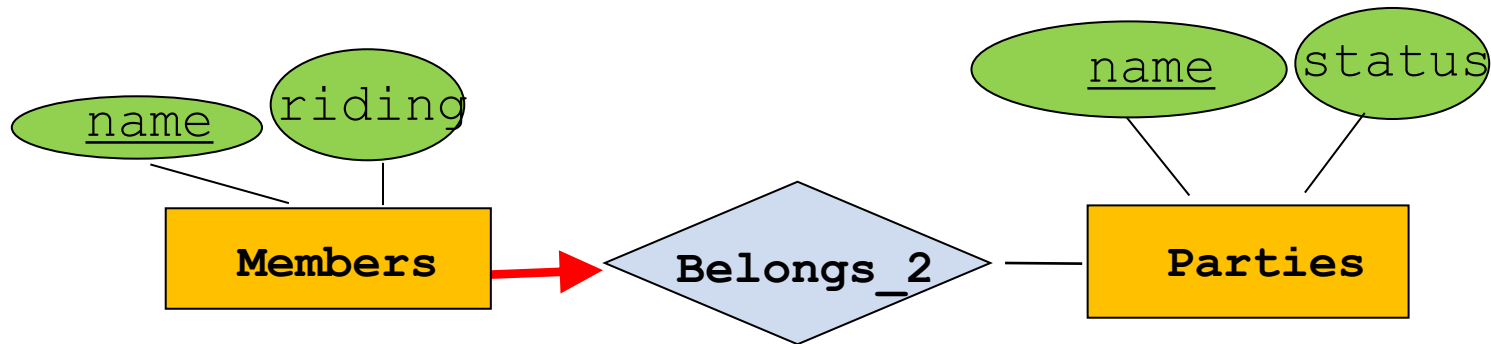
Key+Participation Constraints

Correct or incorrect?

Key+Participation Constraints

Members — name, riding

Belongs_2

Parties — name, status
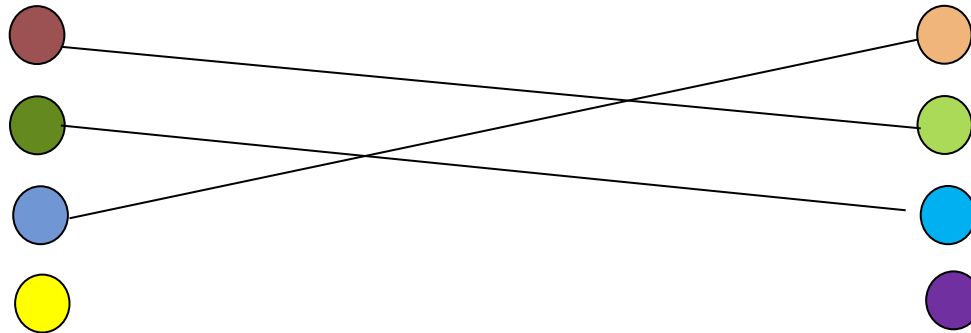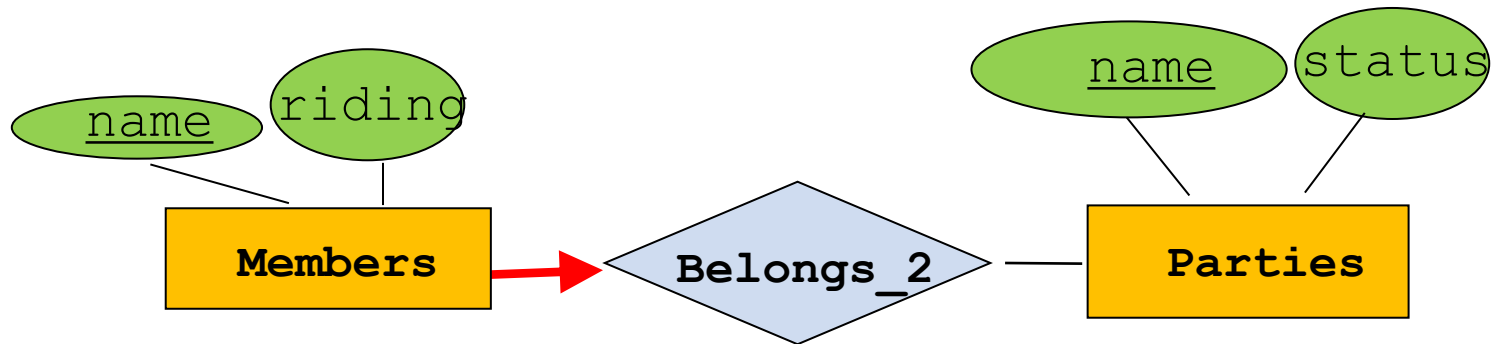
Incorrect

○ is not involved in the relationship

Ternary Relationship
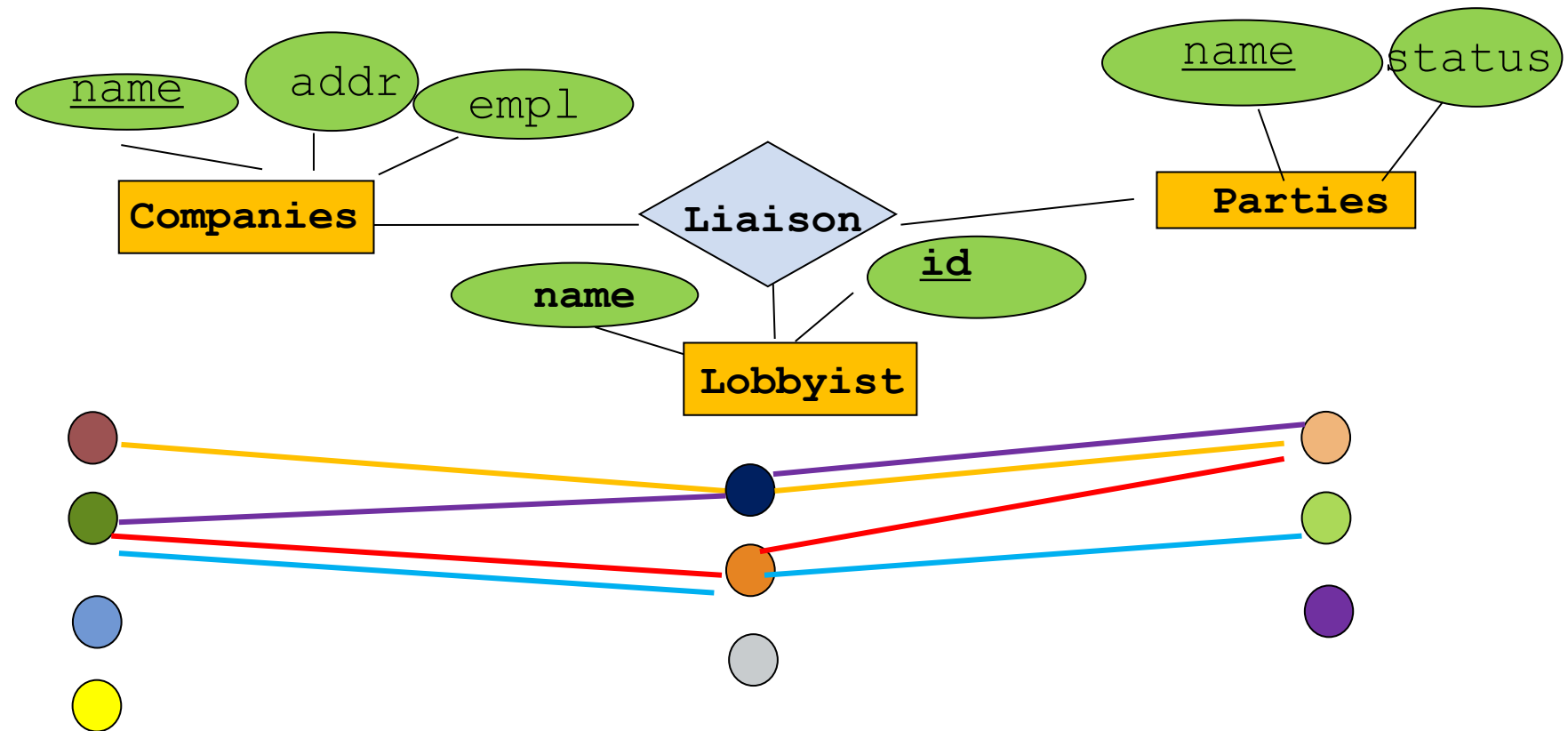
Correct or incorrect?

Ternary Relationship
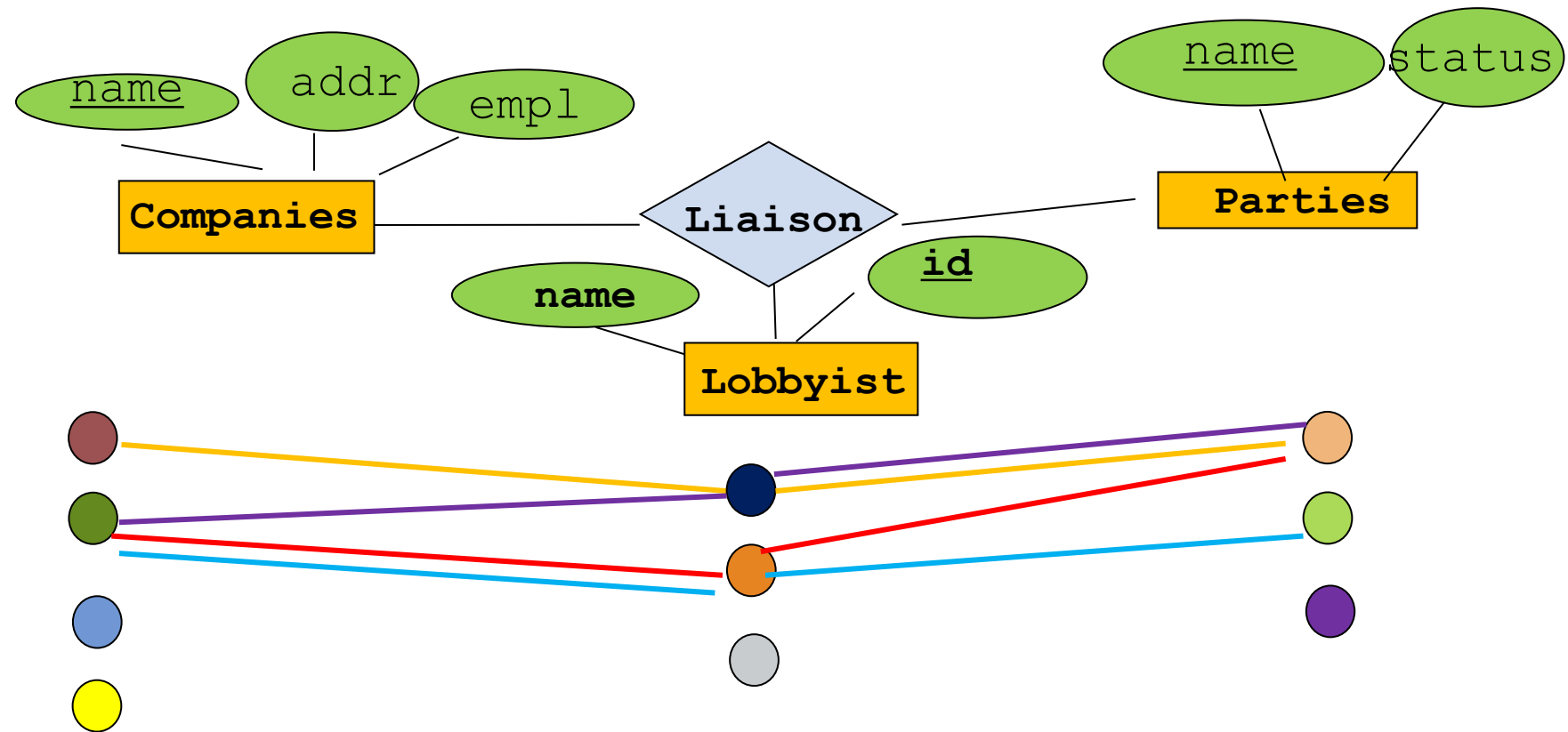
Correct

Although 🟢 and 🟠 are involved twice in the relationship, once its with 🟢 and the other time with 🟠 , thus making each combination of the three entities unique.

Ternary Relationship
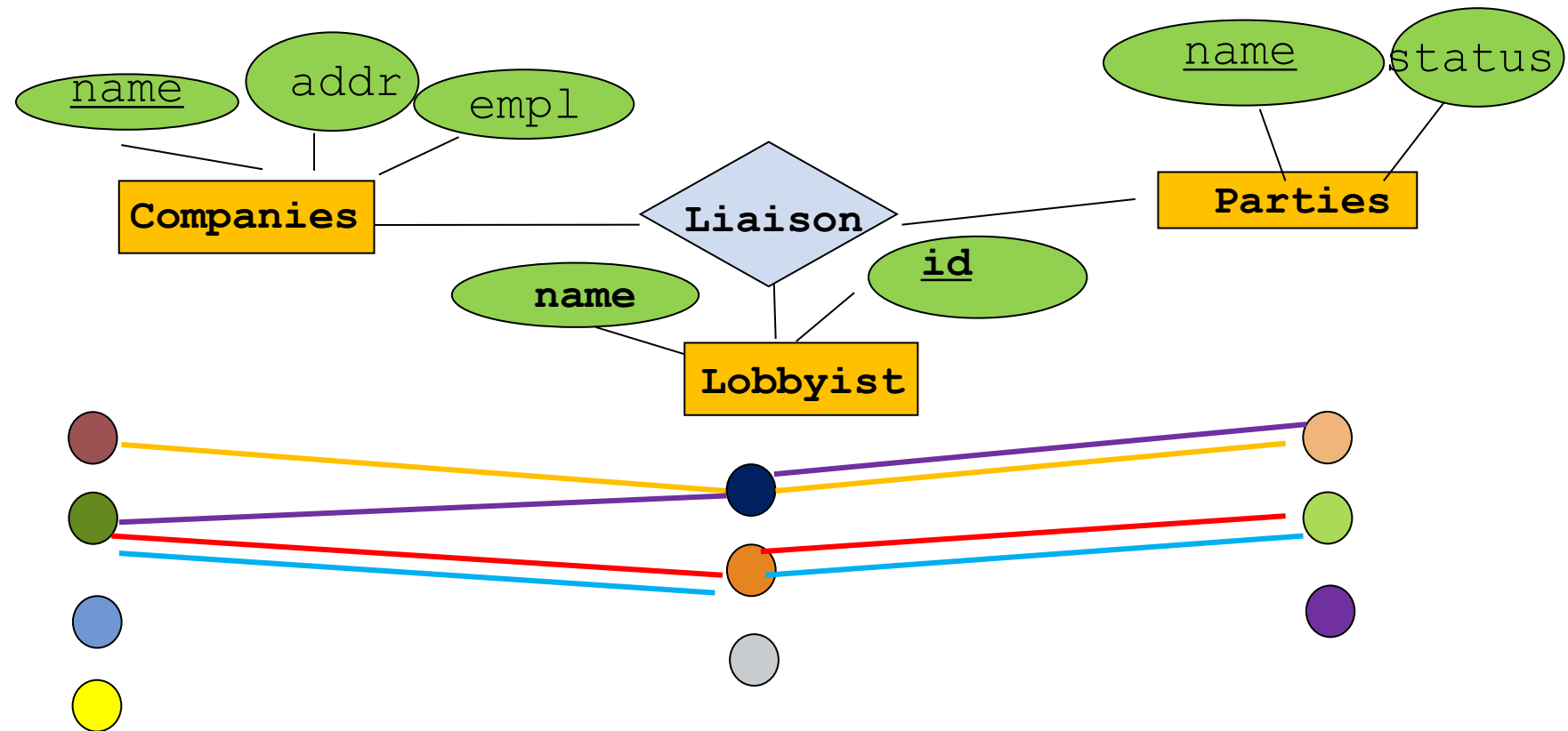
Correct or incorrect?

Ternary Relationship
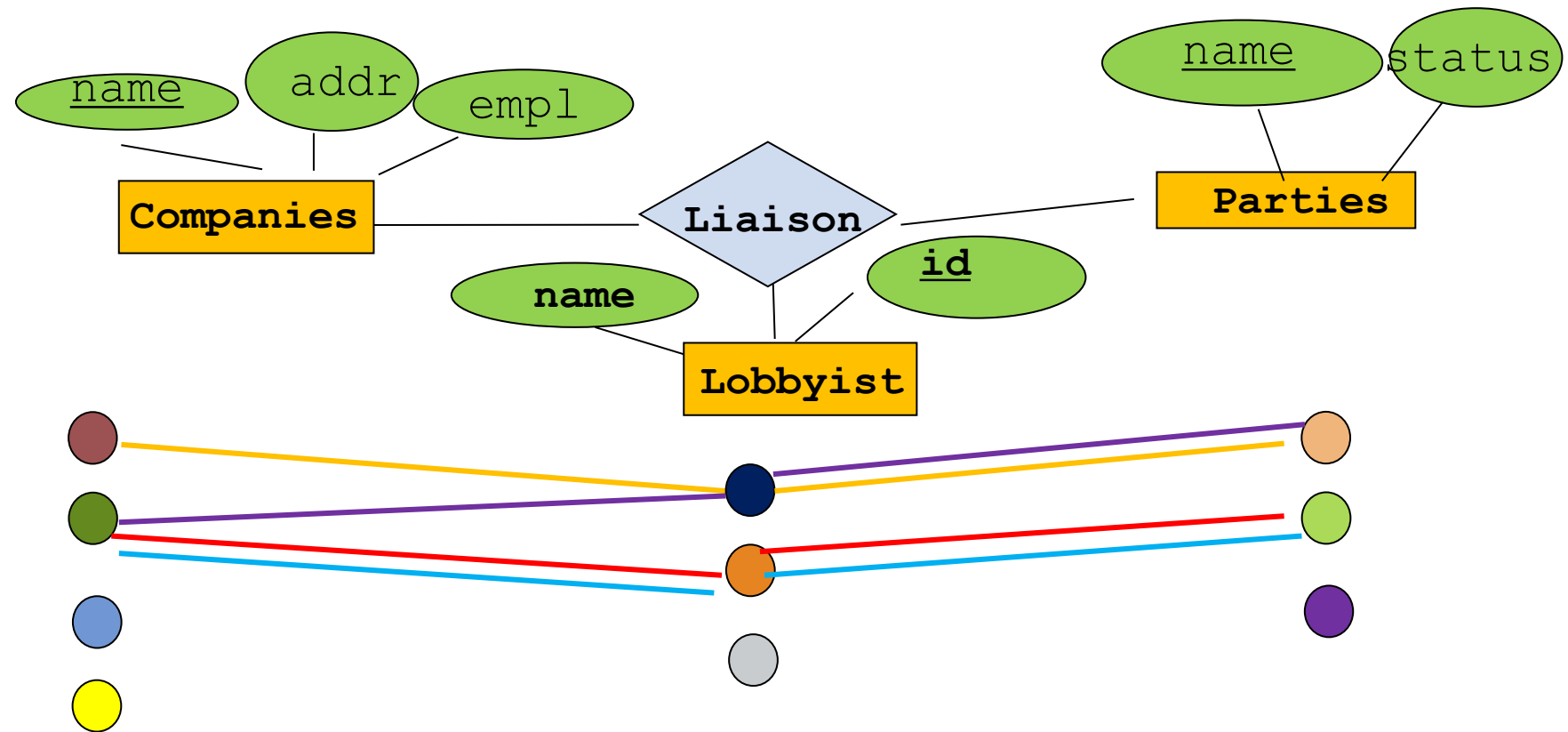
The combination (green), (orange), and (light green) are involved twice in the relationship, hence the combination is not unique.

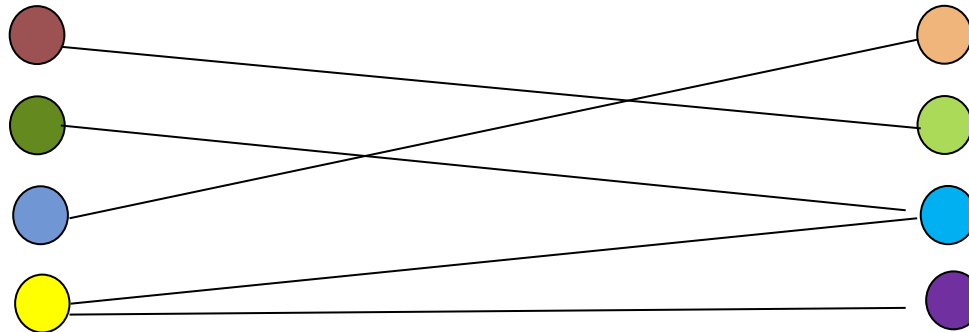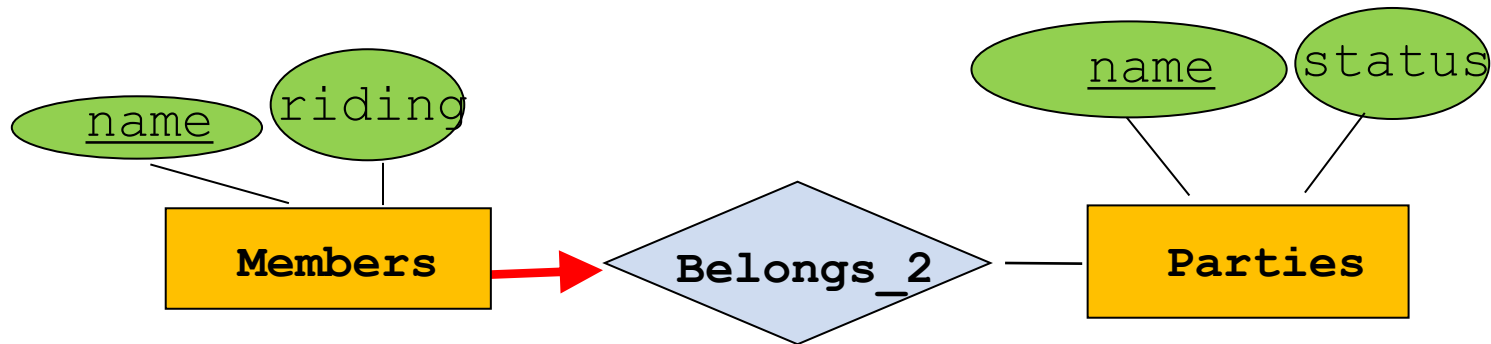# Ternary Relationship + key+participation constraint
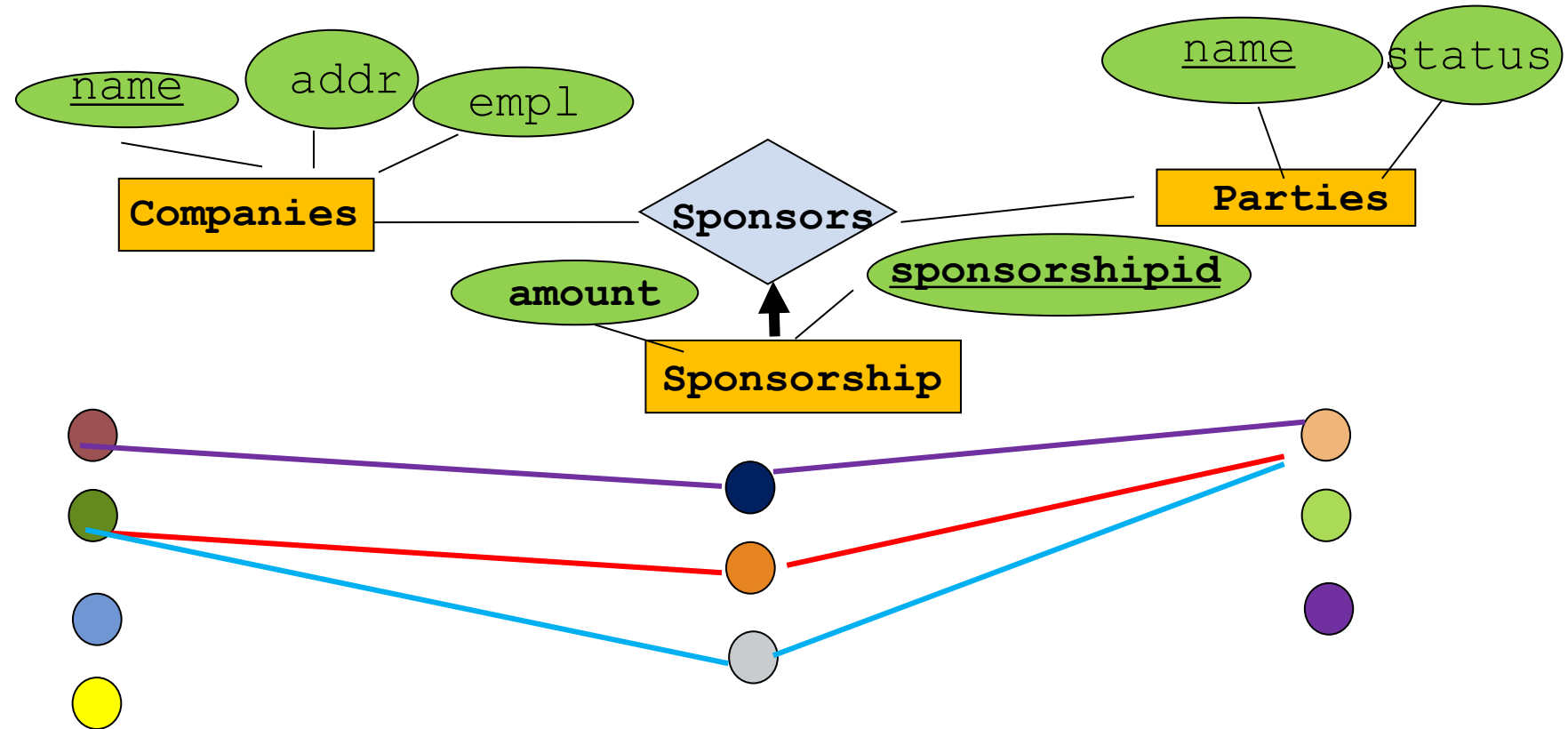
Correct or incorrect?

Ternary Relationship + key+participation constraint

Correct

All entites in the sponsorship relationship is involved exactly once in the relationship.

Ternary Relationship + key+participation constraint

Correct or incorrect?

Ternary Relationship + key+participation constraint

Incorrect

⬤ Is involved twice in the relationship. (violation of key constraint)

Ternary Relationship + key+participation constraint

Correct or incorrect?

Ternary Relationship + key+participation constraint

name addr empl

Companies

Sponsors

name status

Parties

amount sponsorshipid

Sponsorship
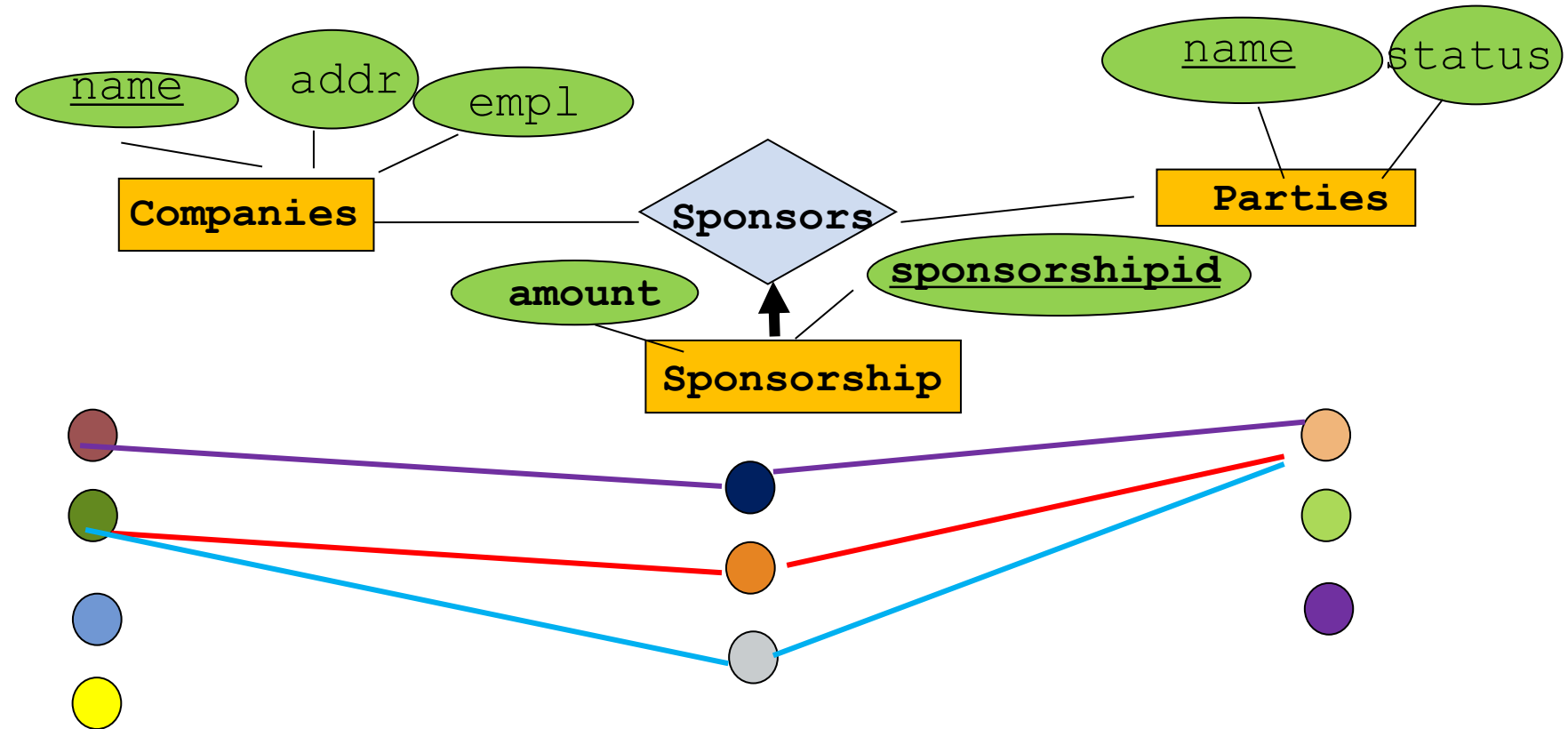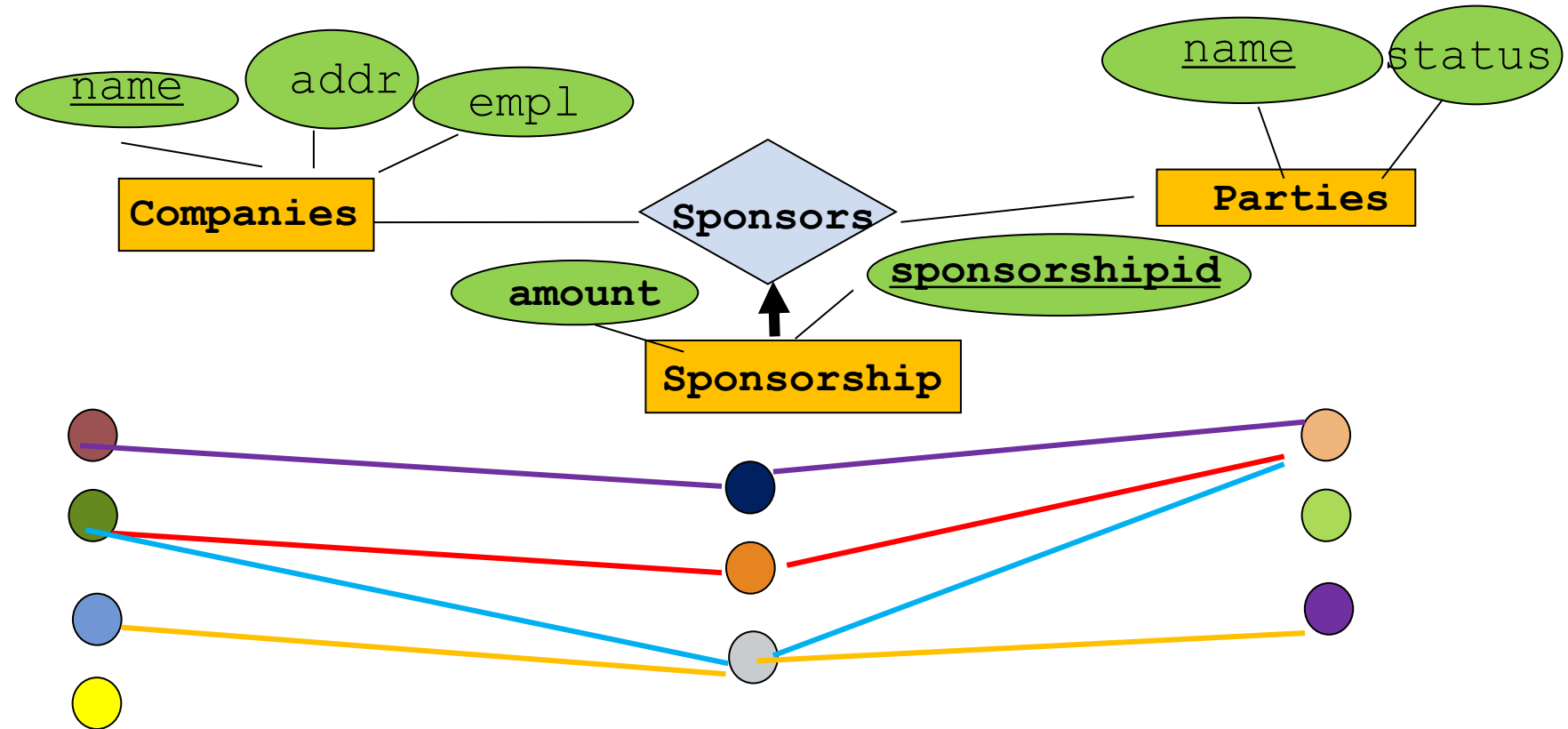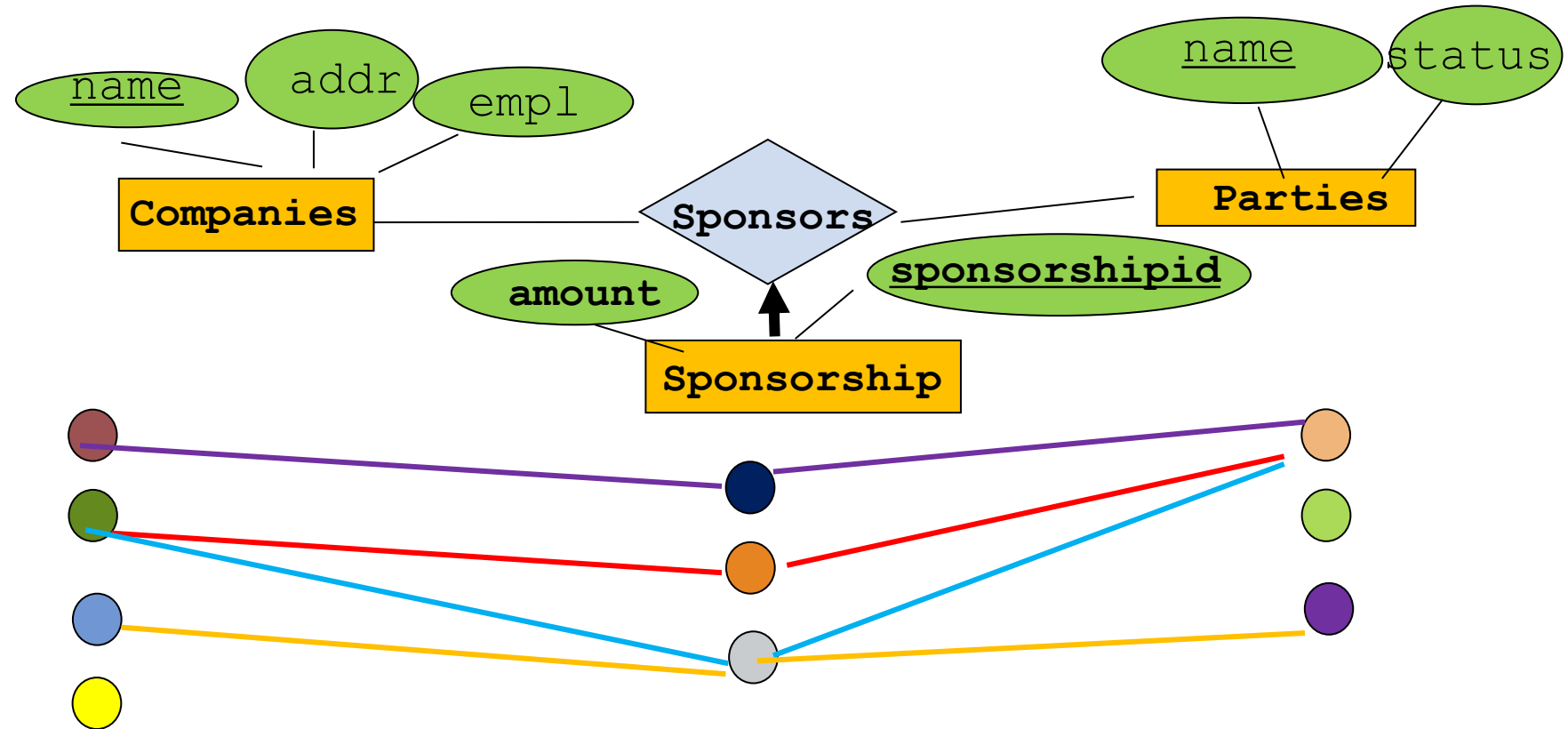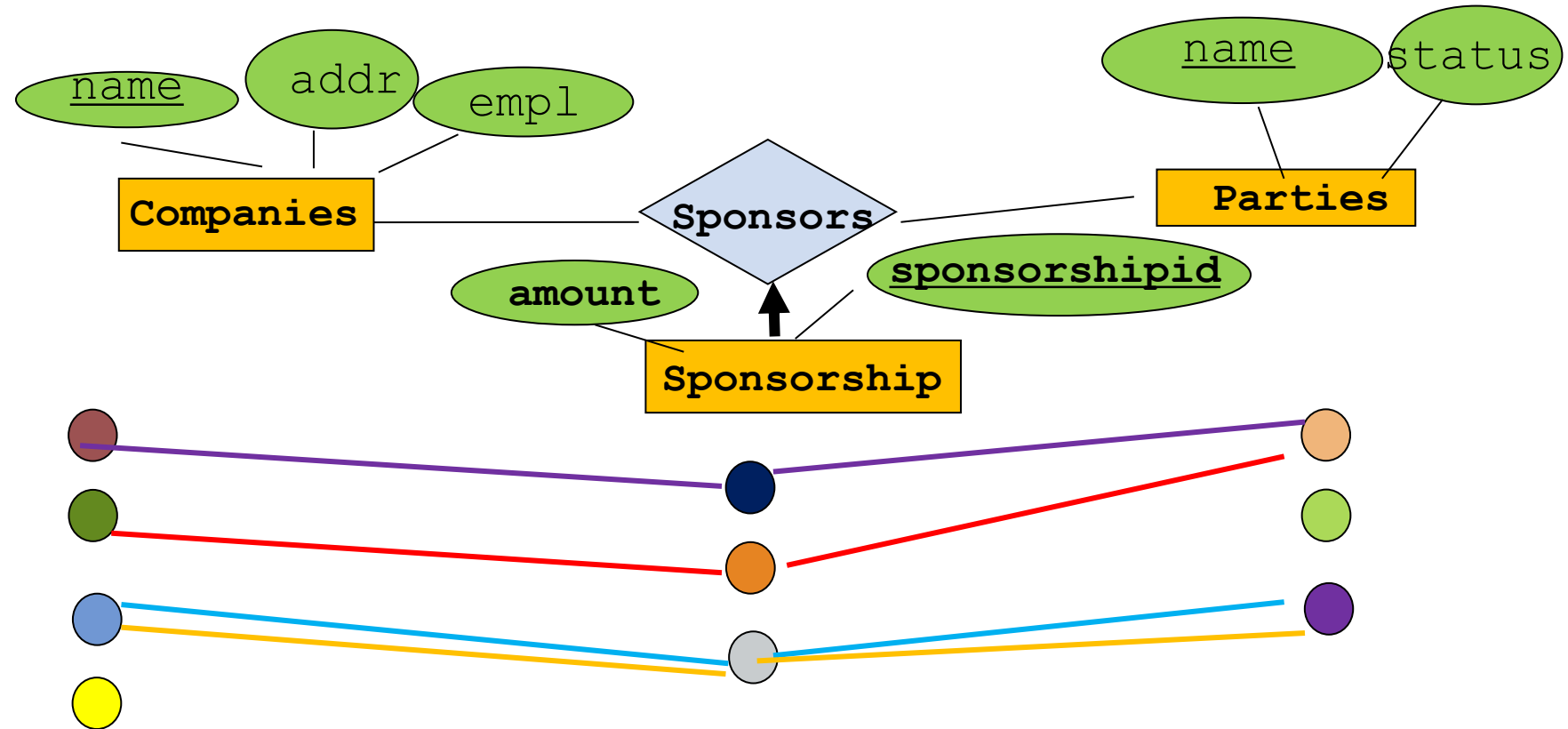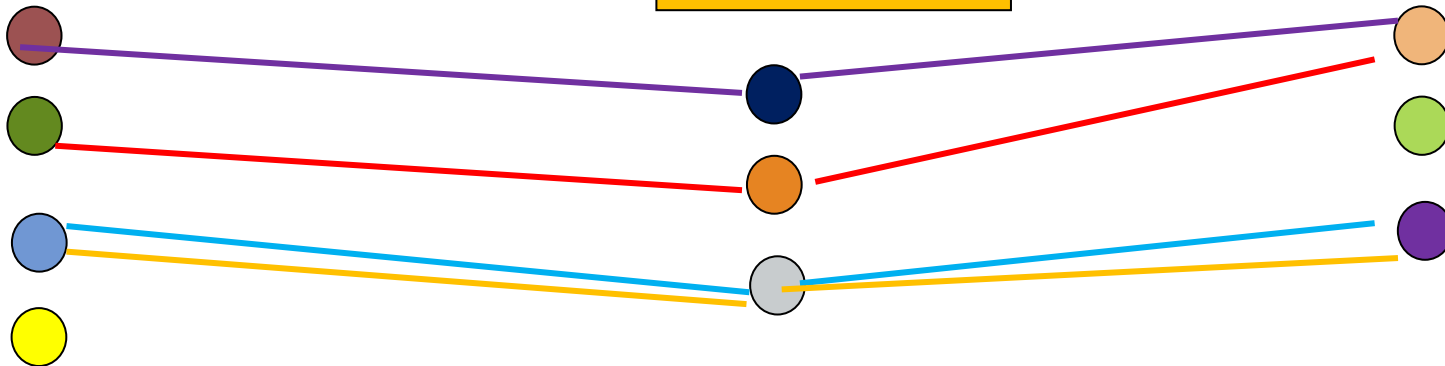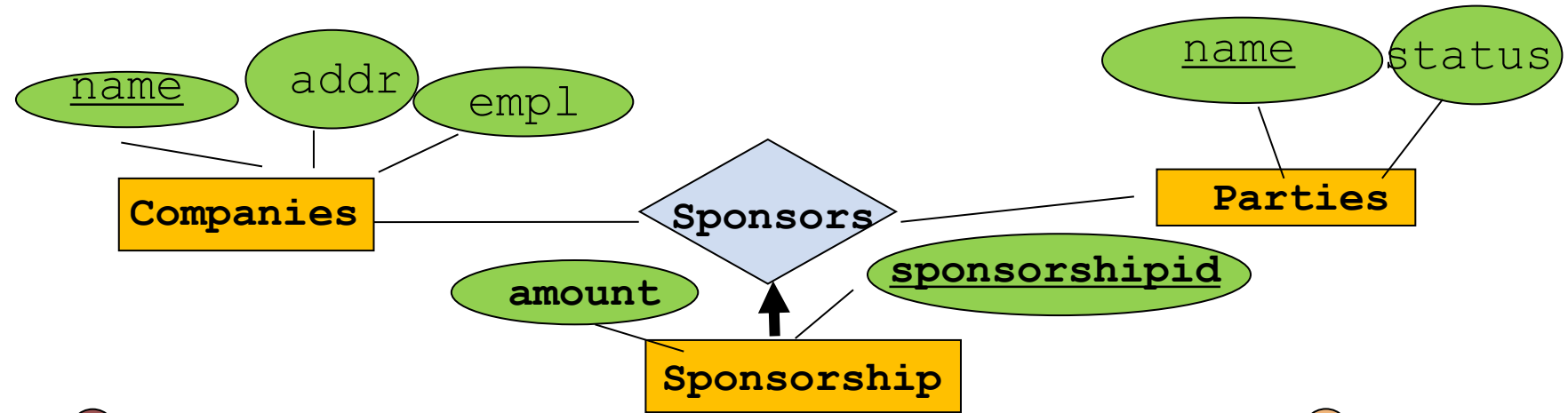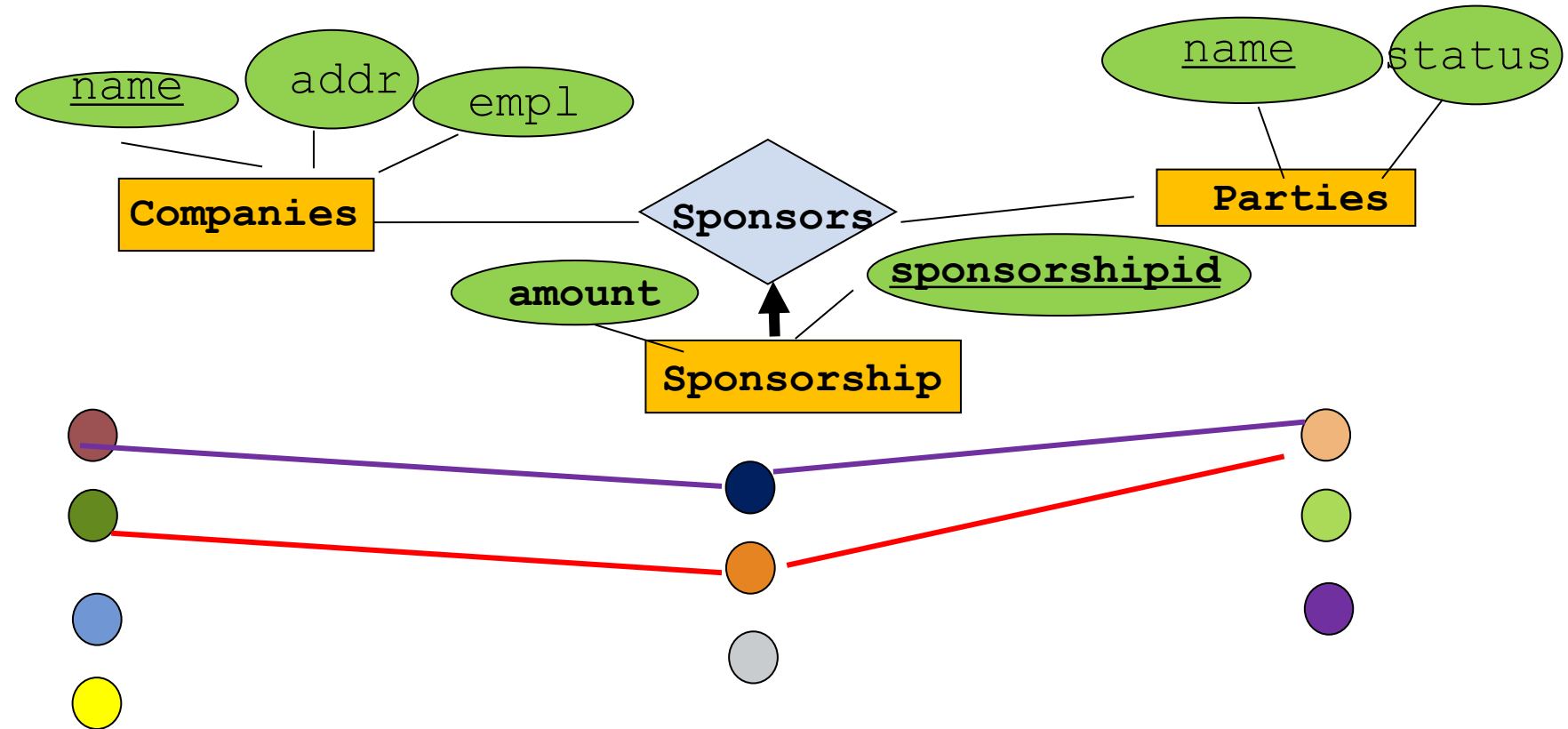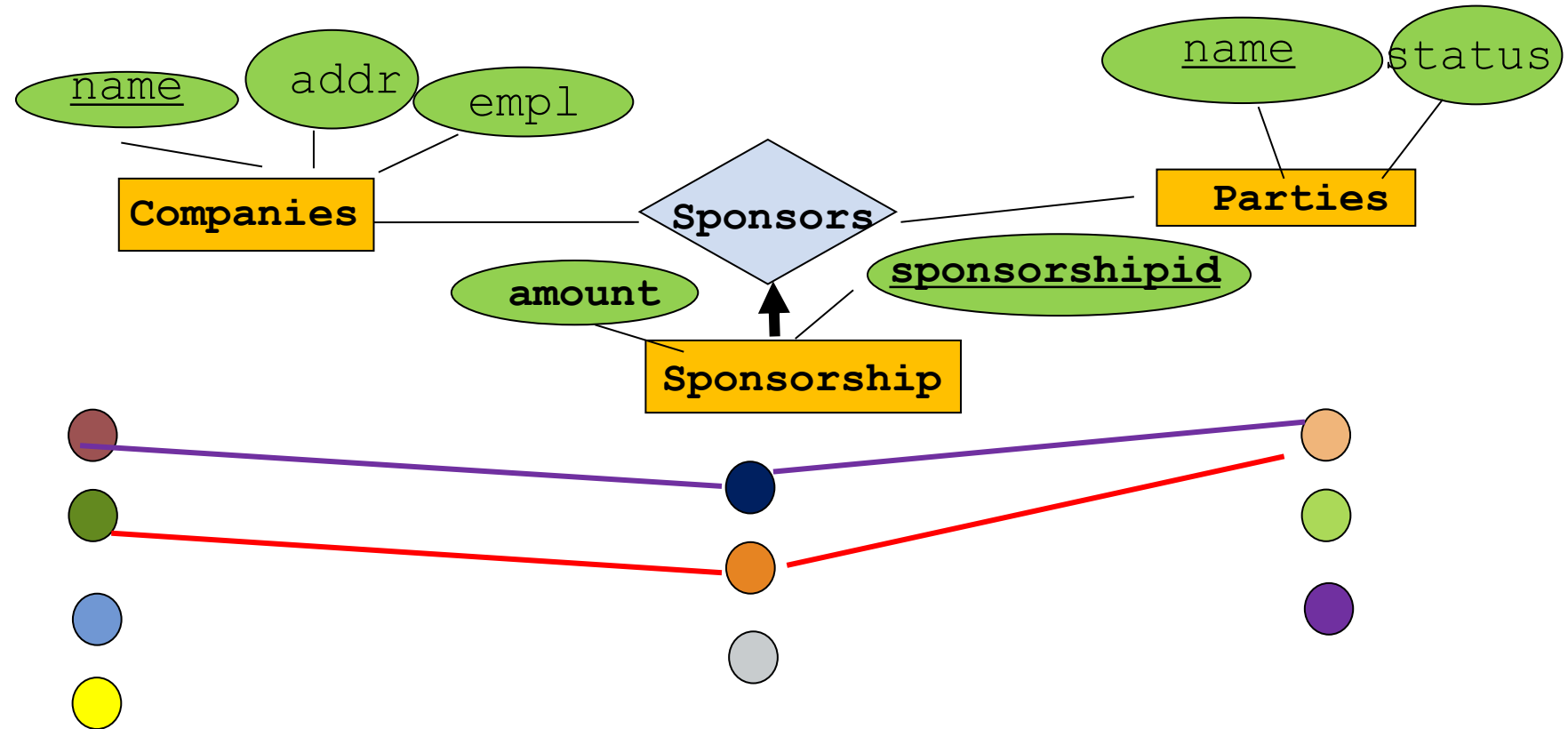
incorrect

Is involved twice in the relationship, combination is not unique.

Ternary Relationship + key+participation constraint

Correct or incorrect?

Ternary Relationship + key+participation constraint

Incorrect

⚪ Is involved not in the relationship. (violation of participation constraint)

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