

Discussion 2

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Problem statement. Feel free to answer one of the following questions:

1. Discuss the selection constructs. Give an illustrative example for each one of them.
2. Discuss the repetition constructs. Give an illustrative example for each one of them.

Problem 1. A selection construct is a fancy way to say that an instruction is carried out only if a certain condition is met. We discussed two basic types of selection construct.

The first is the *if then else* construct. An illustrative example is:

```
if weather = rain then
    bring_umbrella := true;
else
    bring_umbrella := false;
```

This is equivalent to the statement “If the weather is raining, then bring an umbrella, else don’t bring an umbrella.”

The second is the *switch case* construct. An illustrative example is:

```
case (food) of
    pancake: utensil := fork;
    cereal: utensil := spoon;
    smoothie: utensil : straw;
else
    utensil := hand;
end;
```

This is equivalent to the statement “Use a fork to eat pancakes, a spoon to eat cereal, a straw to drink smoothies, and your hands for anything else.”