

# 3-4: Operator overloading and formatting (Practice)

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# Create new crate

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- Create new branch in the repository **p34**
- Create new library crate **p34**
- Check that **p34** is listed as a member of the workspace in the root **Cargo.toml**

# BigUint library

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- Implement in `lib.rs` a simplified `BigUint4096` type, i.e. unsigned 4096 bit integer
- Under the hood use array of `u64s`
- Browse the standard library docs for potentially useful methods:  
<https://doc.rust-lang.org/stable/std/primitive.u64.html>
- Implement basic arithmetic traits
- Implement conversion methods from hex-encoded `&str` and to hex-encoded `String` (be careful about endianness)
- Add integration tests for the type

# Extra task

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- Make `BigUint` type with generic size
- You can use `BigUint<const N: usize>`, where `N` is number of `u64`s used by the type, i.e. size of the integer in bits will be equal to  $64 * N$