```
U4872964V : <@U64MK7215> ison request code?
U64MK7215: Yes. I want the complete elm program
U3SJEDR96 : <a href="http://elm-lang.org/examples/http">http://elm-lang.org/examples/http</a>
U4872964V: are you talking about the JSONRequest object or just general HTTP requests?
U4872964V: <a href="https://guide.elm-lang.org/architecture/effects/http.html">https://guide.elm-lang.org/architecture/effects/http.html</a>
U64MK7215: Json request object. I want an exmaple of an elm program, not just a code snippet
U4872964V: <a href="https://github.com/rtfeldman/elm-spa-example">https://github.com/rtfeldman/elm-spa-example</a> perhaps?
U4872964V: not sure what you are after actually
U4872964V: almost all Elm programs use http requests
U3SJEDR96: <@U64MK7215> ^that's an example. Perhaps you could clarify what you're looking for, and why
:slightly_smiling_face:
U3LUC6SNS: I get the following structure as the result of parsing: ""
> m = run latex "\emph{foo} " |> latexGet
Macro { name = "emph", args = ["foo"] } : LatexParser.Parser.Latex
Here `latex` is a parser and `latexGet` is the code
latexGet r =
  r |> Result.withDefault defaultLatex
I would like to be able to say `m.name`, `m.args`, but this does not work because of a type problem:
> m.name
-- TYPE MISMATCH -----
'm' does not have a field named 'name'.
6 m.name
   ^^^^
The type of `m` is:
  Latex
Which does not contain a field named `name`.
Makes sense. But `Latex` is a union type with `Macro` as a member:
type Latex
  = Macro Macro
  | Environment Environment
  I InlineMath InlineMath
  | DisplayMath DisplayMath
  | Words Words
where
type alias Macro =
  { name : String
  , args : List String
What should I be doing?
U4872964V: you should do `case` on your value first, I suppose
U4872964V: you have to handle all types of Latex
U57KYFW67: Yep. Your `Latex` object may (or may no) be a macro. Maybe it's an `Environment`. If it is, the
environment doesn't have a "name"
U3LUC6SNS: OK, that makes sense
U3LUC6SNS: Thanks <@U4872964V> and <@U57KYFW67>
U3LUC6SNS: Oops, a difficulty: I tried this"
latexGetValue result =
  let
     r =
```

```
latexGet result
in
    case r of
    Macro v ->
    v
    Environment v ->
    v
    etc.
```

but it does not work because in for `Macro`, `v` is a `Macro_`, for `Environment`, `v` is an `Environment_`, etc. A case statement requires the values for each alternative to be of the same type.

U3LUC6SNS: I'd like, if possible, to have one function that when applied to a parser result, gives me a `Macro_`, an `Environment_`, etc. as the case may be.

U4872964V: well, that's not how the type system works in Elm. A value can only have one type, if you want to represent multiple types you make a union type, like the `Latex` type

U4872964V: so, instead, you do the stuff you want to do inside the `case` statement

U3LUC6SNS: OK, I'll think about how to proceed -- thanks!

U4872964V: first question, what do you want to do with the value you have?

U3LUC6SNS: My first goal is to write tests to make sure that as I change and add things, I haven't broken what is already built. To do that I have to get into the inner structure of the parse results.

U3LUC6SNS: Eventually I will use parse results to produce html

U4872964V: so, you are writing a test, where you parse a given value and want to check if it parses correctly?

U3LUC6SNS: yes