

EXAMPLE FILE FOR MERGETEX

PAUL ZINN-JUSTIN

1. INTRODUCTION

some basic examples:

```
R=QQ[x,y]; factor(x^3-y^3)
res coker vars R
OO_(Proj(R/(x^3-y^3)))^{1,2}
matrix {{1,2},{3,4}}
```

The code can also be inline: `gcd(1300,75)`. More:

```
318/46
```

```
exp 3.73767
```

strings and nets:

```
"hehe"
( "haha123456789"
||"hoho!@#%~&*(")
{oo,ooo}
```

printing:

```
for i from 1 to 3 do print(i^2+ii)
```

2. HELP

```
help cohomology
```

3. PACKAGES

packages that have a `tex` output will work:

```
needsPackage "Posets";
booleanLattice 3
```

4. TRICKY EXAMPLES

```
-- some tricky examples
```

A bunch of complicated cases: a multi-line example

```
f = i -> (
-- that's dumb
i+1
)
```

and another weirder one:

```
I=ideal 0; f = i -> (
i+1)
```

finally:

```
a=1;b=2;  
c=3;
```

That last one has no output.

5. REUSING OUTPUT

The output o5 is [Macaulay2 output o5]. The nonexistent output o18 is [Macaulay2 output o18].

6. INPUTTING FROM EXTERNAL FILE

Some more code:

```
-- a test file  
R=QQ[x,y,z]  
poincare ideal(x^2+y^2,x^3+z^3)
```

7. CHANGING KEY/VALUES

```
"some_weird_spacing_and_string_style"
```