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-- Section: CST1-109
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```
import Data.Char
```

```
locate :: Eq a => a -> [a] -> [Int]
locate x ys = map fst (filter ((==x).snd) (zip [1..] ys))
```

```
histogram :: [Int] -> String
histogram xs = concat (map f xs)
  where
    f :: Int -> String
    f x = (concat (replicate x "*")) ++ "\n"
```

```
manyFuns :: [a -> b] -> a -> [b]
manyFuns fs v = map ($ v) fs
```

```
mySort :: Ord a => (a -> a -> Bool) -> [a] -> [a]
mySort p [] = []
mySort p (x:xs) = ins p x (mySort p xs)
  where
    ins p y [] = [y]
    ins p y (z:zs)
      | p y z = y:z:zs
      | otherwise = z:(ins p y zs)
```

```
isFixPt :: Eq a => (a -> a) -> a -> Bool
isFixPt f val = (f val) == val
```

```
changeFirst :: (a -> Bool) -> a -> [a] -> [a]
changeFirst p val [] = []
changeFirst p val (x:xs)
  | p x = val : changeFirst p x xs
  | otherwise = x : changeFirst p val xs
```