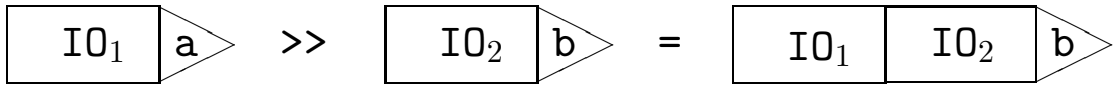
Functions Operating on the `IO` Monad

```
putChar :: Char -> IO ()
```

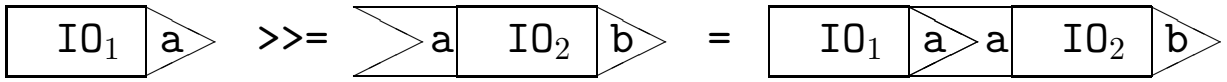
```
getChar :: IO Char
```

```
(>>) :: IO a -> IO b -> IO b
```

```
return :: a -> IO a
```




```
(>>=) :: IO a -> (a -> IO b) -> IO b
```



`getChar >> return ()` reads a character and ignores it

`getChar >>= putChar` reads a character and prints it on the screen

do-Notation

```
gets :: Int -> IO String
gets n = if n <= 0
            then return []
            else getChar >>= \x  ->
                             gets (n-1)  >>= \xs ->
                                             return (x:xs)
```

```
p >>= \x ->
      q >>= \y ->
            r
```

can be written as

```
do x <- p
   y <- q
   r
```

```
gets :: Int -> IO String
gets n = if n <= 0 then return []
                   else do x  <- getChar
                           xs <- gets (n-1)
                           return (x:xs)
```