1. Write a `pois.prob()` function that computes $P(X = x)$, $P(X \neq x)$, $P(X < x)$, $P(X \leq x)$, $P(X > x)$, and $P(X \geq x)$. Enable the user to specify the rate parameter λ.

```r
pois.prob <- function(x, lambda, type="<=") {

  # Initialize result variable
  result <- NA

  # Compute probabilities based on the type argument
  if (type == "=") {
    result <- dpois(x, lambda)   # P(X = x)
  } else if (type == "<") {
    result <- ppois(x - 1, lambda)   # P(X < x)
  } else if (type == "<=") {
    result <- ppois(x, lambda)   # P(X <= x)
  } else if (type == ">") {
    result <- 1 - ppois(x, lambda)   # P(X > x)
  } else if (type == ">=") {
    result <- 1 - ppois(x - 1, lambda)   # P(X >= x)
  }
  return(result)
}
```

2. Write a `beta.prob()` function that computes $P(X = x)$, $P(X \neq x)$, $P(X < x)$, $P(X \leq x)$, $P(X > x)$, and $P(X \geq x)$ for a beta distribution. Enable the user to specify the shape parameters α and β.

```r
beta.prob <- function(x, size, prob, type="<="){
  # Use dbeta and pbeta to conditionally return the correct probability
}
```