Data Manipulation Assignment

Question 1:

Using the iris dataset, perform the following **pipeline**:

1. Filter the dataset to include only rows where the Sepal.Length is greater than 5 and the Species is "setosa".

2. Select only the columns that contain the word "Sepal".

3. Create a new column using mutate that calculates the ratio of Sepal.Length to Sepal.Width and name it Sepal.Ratio. (*Sepal.Ratio = Sepal.Length / Sepal.Width*)

4. Arrange the data by Sepal.Ratio in descending order.

Question 2:

```
patients <- data.frame(
  PatientID = c(1, 2, 3, 4, 5),
  Name = c("Aliya", "Bassem", "Karim", "Dina", "Iman"),
  DepartmentID = c(101, 102, 101, 103, 102)
)

departments <- data.frame(
  PatientID = c(2, 3, 4),
  DepartmentName = c("Cardiology", "Neurology", "Oncology")
)
```

Write an **R line** that answers the following question: **Which patients were not assigned to a medical department**?