Introduction to Swift

Exercise 2

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Create a employee personal information structure and employee professional structure

The properties for personal :

employeeID

name

country(america,india,britain,japan,china)

address

hobbies(optional)

Properties for professional

employeeID

name

department(iOS, android, jvm, full stack, web)

branch(america,india,britain,japan,china)

experienced

TASKS:

1. **create a third employee structure that contains the information from both based on common id.**

- ```swift
  struct Employee {
      var employeeID: Int
      var name: String
      var department: String
      var branch: String
      var experience: Int
      var address: String
      var country: String
      var hobbies: String?
  }

  //Adding entries in Employee structure
  var empArray: [Employee] = []

  for personalEmp in personalArray {
      for professionalEmp in professionalArray {
          if (personalEmp.employeeID == professionalEmp.employeeID) {
              empArray.append(Employee(employeeID:
  personalEmp.employeeID, name: personalEmp.name, department:
  professionalEmp.department, branch: professionalEmp.branch,
  experience: professionalEmp.experience, address: personalEmp.address,
  country: personalEmp.country, hobbies: personalEmp.hobbies))
          }
  ```

```
        }
    }

    print("Answer 1:")
    for index in empArray {
        print(index)
    }
```

2. **write a function that takes the two structure and give me list of all the employee that live in certain country**

   - ```
     func answer2(country: String) -> String{
         print("\nAnswer 2:")
         for personalEmp in personalArray {
             for professionalEmp in professionalArray{
                 if (personalEmp.employeeID == professionalEmp.employeeID
     && personalEmp.country==country)
                 {
                     print(personalEmp)
                 }
             }
         }
         return country
     }
     answer2(country: "India")
     ```

3. **write a function that give me list of all the employee that live in certain department**

   - ```
     func answer3(department: String) -> String{
         print("\nAnswer 3:")
         for emp in empArray {
             if (emp.department==department)
             {
                 print(emp)
             }
         }
         return department
     }
     answer3(department: "iOS")
     ```

4. **write a function that give me list of all the employee that live in same country and work in the same branch.**

   - ```
     func answer4(ans: String) -> String{
         print(ans)
         for emp1 in empArray {
             for emp2 in empArray {
                 if (emp1.country == emp2.branch) {
                     print(emp1)
                 }
             }
     ```

```
        }
        return ans
    }
    answer4(ans: "\nAnswer 4:")
```

5. **write a function that return me list of all the employee name that has a hobby and with their experience.**

```
    ●  func answer5(ans :String) -> String{
          print(ans)
          for emp in empArray {
              print("ID: \(emp.employeeID), Name: \(emp.name), Hobbies:
       \(emp.hobbies ?? "NA"), Experience: \(emp.experience)")
          }
          return ans
      }
      answer5(ans: "\nAnswer 5:")
```

6. **write a function that return me list of all the employee name that starts with any "S"**

```
    ●  func answer6(prefix: String) -> String{
          print("\nAnswer6")
          for emp in empArray {
              if (emp.name.prefix(1)==prefix) {
                  print(emp)
              }
          }
          return prefix
      }
      answer6(prefix: "S")
```