Practical 11.

Simple Restful Service

```
package in.gu.services;

import jakarta.ws.rs.*;
import jakarta.ws.rs.core.MediaType;
import jakarta.ws.rs.core.Response;
import java.util.HashMap;
import java.util.Map;

@Path("/Currency")

public class CurrencyConverterService {

    private static final Map<String, Double>
    exchangeRates = new HashMap<>();

    static {
        exchangeRates.put("USD_TO_INR", 83.0);
        exchangeRates.put("EUR_TO_INR", 90.0);
    }

    @GET
    @PATH("/convert")
    @Produces(MediaType.APPLICATION_JSON)
    public Response convertCurrency(@QueryParam("from")
    String from,
        @QueryParam("to") String to,
        @QueryParam("amount") double amount) {
    String key = from.toUpperCase() + "_TO_" + to.toUpperCase();
```

```
if (!exchangeRates.containsKey(key)){
    return Response.status(Response.Status.BAD_REQUEST)
        .entity("Exchange rate for" + key +
                "not available")
        .build();
}

double rate = exchangeRates.get(key);
double convertedAmount = amount * rate;
Map <String, Object> response = new HashMap<>();
response.put("from", from);
response.put("to", to);
response.put("amount", amount);
response.put("convertedAmount", convertedAmount);
response.put("
return Response.ok(response).build();
}
}
```