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package com.dlj.ir.analysis.ma;

import java.util.Map;
import java.util.WeakHashMap;
/**
 * Marathi light stemmer- removes number, gender and case suffixes from nouns and adjectives
 * Done by Ljiljana Dolamic(University of Neuchatel, www.unine.ch/info/clef/)
 *
 * @author Ljiljana Dolamic. Email: ljiljana.dolamic@unine.ch
 */
public class MarathiStemmerLight {

    /**
     * A cache of words and their stems
     */
    static private Map<String, String> cache = new WeakHashMap<String, String>();

    /**
     * A buffer of the current word being stemmed
     */
    private StringBuilder sb = new StringBuilder();

    /**
     * Default constructor
     */
    public MarathiStemmerLight() {
    }

    public String stem(String word) {
        String result = cache.get(word);

        if (result != null)
            return result;

        //
        sb.delete(0, sb.length());

        //
        sb.append(word);

        /* remove the case endings from nouns and adjectives */
        remove_case(sb);

        remove_No_Gender(sb);

        result = sb.toString();
        cache.put(word, result);

        return result;
    }
}

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private void remove_case(StringBuilder word) {
    int len = word.length() - 1;
    if (len > 5) {
        if (word.substring(len-3, len+1).equals("शय")) {
            word.delete(len - 3, len + 1);
            return;
        }
    } /* end if len > 5 */
    if (len > 4) {
        if (word.substring(len-2, len+1).equals("शे")) {
            word.delete(len - 2, len + 1);
            return;
        }
        if (word.substring(len-2, len+1).equals("शी")) {
            word.delete(len - 2, len + 1);
            return;
        }
        if (word.substring(len-2, len+1).equals("चा")) {
            word.delete(len - 2, len + 1);
            return;
        }
        if (word.substring(len-2, len+1).equals("ची")) {
            word.delete(len - 2, len + 1);
            return;
        }
        if (word.substring(len-2, len+1).equals("चे")) {
            word.delete(len - 2, len + 1);
            return;
        }
        if (word.substring(len-2, len+1).equals("हून")) {
            word.delete(len - 2, len + 1);
            return;
        }
    } /* end if len > 4 */
    if (len > 3) {
        if (word.substring( len-1, len+1).equals("नो")) {
            word.delete(len-1 , len + 1);
            return;
        }
        if (word.substring( len-1, len+1).equals("नो")) {
            word.delete(len-1 , len + 1);
            return;
        }
        if (word.substring( len-1, len+1).equals("ने")) {
            word.delete(len-1 , len + 1);
            return;
        }
        if (word.substring( len-1, len+1).equals("नी")) {
            word.delete(len-1 , len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("ही")) {

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        word.delete(len - 1, len + 1);
        return;
    }
    if (word.substring(len-1, len+1).equals("ते")) {
        word.delete(len - 1, len + 1);
        return;
    }
    if (word.substring(len-1, len+1).equals("या")) {
        word.delete(len - 1, len + 1);
        return;
    }
    if (word.substring(len-1, len+1).equals("ला")) {
        word.delete(len - 1, len + 1);
        return;
    }
    if (word.substring(len-1, len+1).equals("न")) {
        word.delete(len - 1, len + 1);
        return;
    }
    if (word.substring(len-1, len+1).equals("ऊण")) {
        word.delete(len - 1, len + 1);
        return;
    }
} /* end if len > 3 */
if (len > 2) {
    if (word.substring(len, len+1).equals("्")) {
        word.delete(len , len + 1);
        return;
    }
    if (word.substring(len, len+1).equals("र्")) {
        word.delete(len , len + 1);
        return;
    }
    if (word.substring(len, len+1).equals("स")) {
        word.delete(len, len + 1);
        return;
    }
    if (word.substring(len, len+1).equals("ल")) {
        word.delete(len , len + 1);
        return;
    }
    if (word.substring(len, len+1).equals(" र")) {
        word.delete(len , len + 1);
        return;
    }
    if (word.substring(len, len+1).equals("त्")) {
        word.delete(len , len + 1);
        return;
    }
    if (word.substring(len, len+1).equals("म")) {
        word.delete(len , len + 1);
        return;
    }
}

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        }
    } /* end if len > 2 */
    return;
}

private void remove_No_Gender(StringBuilder word) {
    int len = word.length() - 1;
    if (len > 5) {
        if (word.substring(len-3, len+1).equals("रुडा")) {
            word.delete(len - 3, len + 1);
            return;
        }
    } /* end if len > 5 */
    if (len > 4) {
        if (word.substring( len- 2, len+1).equals("ढा")) {
            word.delete(len-2 , len + 1);
            return;
        }
    } /* end if len > 4 */
    if (len > 3) {
        if (word.substring( len-1, len+1).equals("डु")) {
            word.delete(len-1 , len + 1);
            return;
        }
        if (word.substring( len-1, len+1).equals("डे")) {
            word.delete(len-1 , len + 1);
            return;
        }
        if (word.substring( len- 1, len+1).equals("ती")) {
            word.delete(len-1 , len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("िन")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("िण")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("डा")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("डी")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("गा")) {
            word.delete(len - 1, len + 1);
            return;
        }
    }
}

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        if (word.substring(len-1, len+1).equals("ल")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("ळ")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("य")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("व")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("ये")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("वे")) {
            word.delete(len - 1, len + 1);
            return;
        }
        if (word.substring(len-1, len+1).equals("ती")) {
            word.delete(len - 1, len + 1);
            return;
        }
    }
} /* end if len > 4 */
if (len > 2) {
    if (word.substring(len, len+1).equals("अ")||
        word.substring(len, len+1).equals("ँ")||
        word.substring(len, len+1).equals("इ")||
        word.substring(len, len+1).equals("ः")||
        word.substring(len, len+1).equals("ी")||
        word.substring(len, len+1).equals("ै") ||
        word.substring(len, len+1).equals("े") ) {
        word.delete(len, len + 1);
        return;
    }
    if (word.substring(len, len+1).equals(" ळ")||
        word.substring(len, len+1).equals("ँ")||
        word.substring(len, len+1).equals("ँ")||
        word.substring(len, len+1).equals("ँ") ) {
        word.delete(len , len + 1);
        return;
    }
}
} /* end if len > 2 */
return;
}
}

```