```
package com.company;
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Scanner;
public class Main {
  public static void printTarget(int target, ArrayList<String> tokens)
    String output = tokens.get(target);
    System.out.println(output.toUpperCase());
  }
  public static void printBefore(int target, ArrayList<String> tokens)
    int before = target - 3;
    try{
      System.out.print(tokens.get(before));
    }
    catch(IndexOutOfBoundsException ex){
      return;
    }
  }
  public static void printAfter(int target, ArrayList<String> tokens)
    for(int after = target + 1; after < target + 3; after++){</pre>
      try{
         System.out.print(tokens.get(after));
      catch(IndexOutOfBoundsException ex){
         return;
    }
  }
  /*public static void alphebetizer(int target, ArrayList<String> tokens)
  {
  }*/
  public static void main(String[] args)
    Scanner in = new Scanner(System.in);
```

```
String input;

System.out.print("Enter the input for KWIC: ");
input = in.nextLine();

//System.out.print(input);

ArrayList<String> tokens = new ArrayList<String>(Arrays.asList(input.split(" ")));

//System.out.print(tokens);

for(int target = 0; target < tokens.size(); target++){
    printBefore(target, tokens);
    printTarget(target, tokens);
    printAfter(target, tokens);
    System.out.print("\n");
    }
}</pre>
```

## OUTPUT

 $"C:\Pr oran Files \ \ IntelliJ\ IDEA\ Community\ Edition$ 2018.2.4\lib\idea\_rt.jar=60122:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2018.2.4\bin" -Dfile.encoding=UTF-8 -classpath "C:\Users\Thuy\Desktop\Object Oriented Programming\Assignment 2\KWIC\out\production\KWIC" com.company.Main

Enter the input for KWIC: Sunset is the time of day when our sky meets the outer space solar winds. There are blue, de es

pink, and purple swirls, spinning and twisting, like clouds of balloons caught in a blender. The sun moves slowly to hic behind the line of horizon, while the moon races to take its place in prominence atop the night sky. People slow to a crawl, entranced, fully forgetting the deeds that still must be done. There is a coolness, a calmness, when the sun does set.
SUNSET
isthe
IS
thetime
THE
timeof
SunsetTIME
ofday
isOF
daywhen
theDAY
whenour
timeWHEN
oursky
ofOUR
skymeets
daySKY
meetsthe
whenMEETS
theouter
ourTHE
outerspace
skyOUTER
spacesolar

meetsSPACE
solarwinds.
theSOLAR
winds.There
outerWINDS.
Thereare
spaceTHERE
areblue,
solarARE
blue,pink,
winds.BLUE,
pink,and
TherePINK,
andpurple
areAND
purpleswirls,
blue,PURPLE
swirls,spinning
pink,SWIRLS,
spinningand
andSPINNING
andtwisting,
purpleAND
twisting,like
swirls,TWISTING,
likeclouds
spinningLIKE
cloudsof
andCLOUDS
ofballoons
twisting,OF
balloonscaught

likeBALLOONS
caughtin
cloudsCAUGHT
ina
ofIN
ablender.
balloonsA
blender.The
caughtBLENDER.
Thesun
inTHE
sunmoves
aSUN
movesslowly
blender.MOVES
slowlyto
TheSLOWLY
tohide
sunTO
hidebehind
movesHIDE
behindthe
slowlyBEHIND
theline
toTHE
lineof
hideLINE
ofhorizon,
behindOF
horizon,while
theHORIZON,
whilethe

lineWHILE
themoon
ofTHE
moonraces
horizon,MOON
racesto
whileRACES
totake
theTO
takeits
moonTAKE
itsplace
racesITS
placein
toPLACE
inprominence
takeIN
prominenceatop
itsPROMINENCE
atopthe
placeATOP
thenight
inTHE
nightsky.
prominenceNIGHT
sky.People
atopSKY.
Peopleslow
thePEOPLE
slowto
nightSLOW
toa

sky.TO
acrawl,
PeopleA
crawl,entranced,
slowCRAWL,
entranced,fully
toENTRANCED,
fullyforgetting
aFULLY
forgettingthe
crawl,FORGETTING
thedeeds
entranced,THE
deedsthat
fullyDEEDS
thatstill
forgettingTHAT
stillmust
theSTILL
mustbe
deedsMUST
bedone.
thatBE
done.There
stillDONE.
Thereis
mustTHERE
isa
belS
acoolness,
done.A
coolness,a

ThereCOOLNESS,
acalmness,
isA
calmness,when
aCALMNESS,
whenthe
coolness,WHEN
thesun
аТНЕ
sundoes
calmness,SUN
doesset.
whenDOES
set.
theSET.

Process finished with exit code 0