Name: Papon Biswas	7
ID: IT-22019	
1. kth smallest denent in an amonylist and.	
import java. ufil. *; *. Ithe. sort. troymi	
public class Kth smallest? Easuporthown cools silder	
public static into findthsmallest (Annaylist < integer > list, lot &	10
anound collection asport (1840), when " - two prints	.)[_
3	
public static void main (String [] args) [
Appropriate Cintegers (Stoing []) args) [Appropriate Cintegers (15)=New awaylist < favorage ashist (7,2,	1
bread they seed they bear (posses of seed of the destroy of they of the seed of the conference of the	1,6,8,

System. out. println ("kth smalleyt:" + findsthigmalleyt (word), (cord), two. out. println ("hop of forequency;" + forequences, "+ forequences, ").

2. Treemap to map words to their frequencies
import , Java. util.*; (x.11) v. svol toograi
public clan wordthequery 2 Hollan 2 12 22010 sidely
public static void main (stoing [] angs). E sides to tell angular > tellome to tellome to apple vorange banana ap
String text = " apple bankina apple orange banana ap
string [] words = txt : sput (upon) tel courted
Treemap < string, integer > frequencymap thew treemap < > C. for (string word: words) Frequencymap thew treemap < > C. frequencymap. put (word, frequencymap, getomerkult-(word, frequencymap, put (word, frequencymap, getomerkult-(word, System, out, printly ("lubred treeman, out, printly ("lubred treeman, out, printly ("lubred treeman, out, or other order).
prequencymap. put (word, frequencymap, getonofaut (word
System out printly (" Kth smallest: " + find its finallest (")
System. out. println ("Word Frequency: " + frequency),
}

3. Implement queue and stack using priority gueve with custom comparator: · * Jitos , oval topymi import java. util. *; elass student } public class priority structure [20001 Bists public Static voil main (stoling [7 angs) 5 priority Queue Zinteger > Stack = new priority Queue compando Stack, addAll (Appay. ashist (1,2,3,4)); while (! stack is froty (2)) Egniate sudua System. out. printin ("Stack pope" to Stack policy); priority Queue < integer> queue = new priority Queue > (companyo Quece addAn (Army, Bylist (4,3,2,1)); estile. (! quement is Empty) & Prstem - out prittin ("Queue poil Students. Put (101) new Student ("Bob", 21)) students put (103, new student ("charlie" 19)). for (once, Goth) Cotoy / integer, shude it > Gotoy:

4. Ma Treemap of student IDS to their defulls,

impat java. util. *; · 4. Illas. aval tappol class student { public class priority structure & man griste int age; Think man how shake silding student (strong name int age) & this name = name ; this age tage mant) Ilfibbs , Hoste public string tostoling () = 10018!) 2000 1 (1) 11.9. Beturn name fings it tage + ")"; notey? publicacions studentmap { Treemap < integer, Student & students = new treemap <>() students, put (102, new student ("Alice "> 201); Students. put (101, new student ("Bob", 21))? Students put (103, new student ("Charlie" 19)); for (Map, Gothy Entry & integer, student > Entry: student, entry

system. out. Println ("ID:"+ entry gatbey ()+", Infor:"+ entry, getvalue ());

Hashmap of employee IDs to department. to

public double Employeemap 5 =) Import Jana, will, x,

Public Static void main (staing [] agg) {

Hashnop < Integer, string > employeedepartment = mer Hoshmykly, employed Baggartnent, put (1001, "HR");

employee Department. Put (1002, "It");

employed bepartment. Put (1663, "Finance, 1);

for (map. En.try/Integer, string) entry: employeeDepartment

entayset (1) } System.out. pnintln ("Employee ID! "+ Entry, get Rep()+" , Department: 1,4 entry, getralus. (3) :