Various String Programs

February 21, 2012 | 0 comments

Here are some good library of string functions which makes string manipulation in Java easy. Understanding and the skill of string manipulation is tested quite well in both Interviews and Exams. Some of the programs are very simple but some are quite complicated. According to Algorithm Complexity point of view most of the programs are given by Sedgewick and Wayne in their book.

For understanding strings, click here: Link

Eg. Input / Applications

Input: Java

Output: JaAcnnn

```
import java.io.*;
import java.lang.Character;
class Test
{
    int[] count;
    int[] c;
    String origin, sorc = "";
    Test(int[] cnt, int[] c)
    {
        this.count=cnt;
        this.c=c;
        for(int i=0;i<cnt.length;i++)
        {
            if(cnt[i]>0)
            {
                sorc=sorc+(char)(i);
            }
        }
        origin=sorc;
        for(int i=0;i<sorc.length();i++)
        {
            if(cnt[(int)(sorc.charAt(i))]>1)
            {
                continue;
            }
            else
            {
                cnt[(int)(sorc.charAt(i))]=1;
            }
        }
        this.count=cnt;
        this.c=c;
        System.out.println("Original String : " + origin);
        System.out.println("String after removing duplicates : " + sorc);
    }
    void printCount()
    {
        for(int i=0;i<count.length;i++)
        {
            if(count[i]>0)
            {
                System.out.print("Frequency of the letter " + (char) i + " is the occurance " + (int) i + " \n");
            }
        }
    }
    void printSort()
    {
        System.out.print("Frequencies of the letter " + (char) i + " is the occurance " + (int) i + " \n");
    }
}
```

Program to find the occurance of a given letter in the inputted string in Java:

Input: Java Is.?

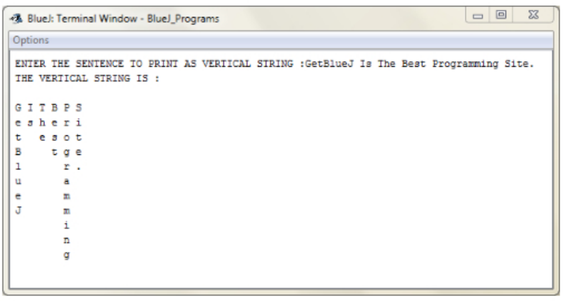
```
class check
{
    BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
    String[] str, sorc, temp, tmp, s = new String[100];
    int[] count, c, ch = new int[100];
    int i=0, j=0, k=0, l=0, m=0, n=0, o=0, p=0, q=0, r=0, s=0, t=0, u=0, v=0, w=0, x=0, y=0, z=0;
    int[] temp1, tmp1, c1, c2, c3, c4, c5, c6, c7, c8, c9, c10, c11, c12, c13, c14, c15, c16, c17, c18, c19, c20, c21, c22, c23, c24, c25, c26, c27, c28, c29, c30, c31, c32, c33, c34, c35, c36, c37, c38, c39, c40, c41, c42, c43, c44, c45, c46, c47, c48, c49, c50, c51, c52, c53, c54, c55, c56, c57, c58, c59, c60, c61, c62, c63, c64, c65, c66, c67, c68, c69, c70, c71, c72, c73, c74, c75, c76, c77, c78, c79, c80, c81, c82, c83, c84, c85, c86, c87, c88, c89, c90, c91, c92, c93, c94, c95, c96, c97, c98, c99, c100;
    char[] ch1, ch2, ch3, ch4, ch5, ch6, ch7, ch8, ch9, ch10, ch11, ch12, ch13, ch14, ch15, ch16, ch17, ch18, ch19, ch20, ch21, ch22, ch23, ch24, ch25, ch26, ch27, ch28, ch29, ch30, ch31, ch32, ch33, ch34, ch35, ch36, ch37, ch38, ch39, ch40, ch41, ch42, ch43, ch44, ch45, ch46, ch47, ch48, ch49, ch50, ch51, ch52, ch53, ch54, ch55, ch56, ch57, ch58, ch59, ch60, ch61, ch62, ch63, ch64, ch65, ch66, ch67, ch68, ch69, ch70, ch71, ch72, ch73, ch74, ch75, ch76, ch77, ch78, ch79, ch80, ch81, ch82, ch83, ch84, ch85, ch86, ch87, ch88, ch89, ch90, ch91, ch92, ch93, ch94, ch95, ch96, ch97, ch98, ch99, ch100;
    char[] temp2, tmp2, c11, c12, c13, c14, c15, c16, c17, c18, c19, c20, c21, c22, c23, c24, c25, c26, c27, c28, c29, c30, c31, c32, c33, c34, c35, c36, c37, c38, c39, c40, c41, c42, c43, c44, c45, c46, c47, c48, c49, c50, c51, c52, c53, c54, c55, c56, c57, c58, c59, c60, c61, c62, c63, c64, c65, c66, c67, c68, c69, c70, c71, c72, c73, c74, c75, c76, c77, c78, c79, c80, c81, c82, c83, c84, c85, c86, c87, c88, c89, c90, c91, c92, c93, c94, c95, c96, c97, c98, c99, c100;
    int[] temp3, tmp3, c101, c102, c103, c104, c105, c106, c107, c108, c109, c110, c111, c112, c113, c114, c115, c116, c117, c118, c119, c120, c121, c122, c123, c124, c125, c126, c127, c128, c129, c130, c131, c132, c133, c134, c135, c136, c137, c138, c139, c140, c141, c142, c143, c144, c145, c146, c147, c148, c149, c150, c151, c152, c153, c154, c155, c156, c157, c158, c159, c160, c161, c162, c163, c164, c165, c166, c167, c168, c169, c170, c171, c172, c173, c174, c175, c176, c177, c178, c179, c180, c181, c182, c183, c184, c185, c186, c187, c188, c189, c190, c191, c192, c193, c194, c195, c196, c197, c198, c199, c200;
    char[] ch101, ch102, ch103, ch104, ch105, ch106, ch107, ch108, ch109, ch110, ch111, ch112, ch113, ch114, ch115, ch116, ch117, ch118, ch119, ch120, ch121, ch122, ch123, ch124, ch125, ch126, ch127, ch128, ch129, ch130, ch131, ch132, ch133, ch134, ch135, ch136, ch137, ch138, ch139, ch140, ch141, ch142, ch143, ch144, ch145, ch146, ch147, ch148, ch149, ch150, ch151, ch152, ch153, ch154, ch155, ch156, ch157, ch158, ch159, ch160, ch161, ch162, ch163, ch164, ch165, ch166, ch167, ch168, ch169, ch170, ch171, ch172, ch173, ch174, ch175, ch176, ch177, ch178, ch179, ch180, ch181, ch182, ch183, ch184, ch185, ch186, ch187, ch188, ch189, ch190, ch191, ch192, ch193, ch194, ch195, ch196, ch197, ch198, ch199, ch200;
    int[] temp4, tmp4, c201, c202, c203, c204, c205, c206, c207, c208, c209, c210, c211, c212, c213, c214, c215, c216, c217, c218, c219, c220, c221, c222, c223, c224, c225, c226, c227, c228, c229, c230, c231, c232, c233, c234, c235, c236, c237, c238, c239, c240, c241, c242, c243, c244, c245, c246, c247, c248, c249, c250, c251, c252, c253, c254, c255, c256, c257, c258, c259, c260, c261, c262, c263, c264, c265, c266, c267, c268, c269, c270, c271, c272, c273, c274, c275, c276, c277, c278, c279, c280, c281, c282, c283, c284, c285, c286, c287, c288, c289, c290, c291, c292, c293, c294, c295, c296, c297, c298, c299, c300;
    char[] ch201, ch202, ch203, ch204, ch205, ch206, ch207, ch208, ch209, ch210, ch211, ch212, ch213, ch214, ch215, ch216, ch217, ch218, ch219, ch220, ch221, ch222, ch223, ch224, ch225, ch226, ch227, ch228, ch229, ch230, ch231, ch232, ch233, ch234, ch235, ch236, ch237, ch238, ch239, ch240, ch241, ch242, ch243, ch244, ch245, ch246, ch247, ch248, ch249, ch250, ch251, ch252, ch253, ch254, ch255, ch256, ch257, ch258, ch259, ch260, ch261, ch262, ch263, ch264, ch265, ch266, ch267, ch268, ch269, ch270, ch271, ch272, ch273, ch274, ch275, ch276, ch277, ch278, ch279, ch280, ch281, ch282, ch283, ch284, ch285, ch286, ch287, ch288, ch289, ch290, ch291, ch292, ch293, ch294, ch295, ch296, ch297, ch298, ch299, ch300;
    int[] temp5, tmp5, c301, c302, c303, c304, c305, c306, c307, c308, c309, c310, c311, c312, c313, c314, c315, c316, c317, c318, c319, c320, c321, c322, c323, c324, c325, c326, c327, c328, c329, c330, c331, c332, c333, c334, c335, c336, c337, c338, c339, c340, c341, c342, c343, c344, c345, c346, c347, c348, c349, c350, c351, c352, c353, c354, c355, c356, c357, c358, c359, c360, c361, c362, c363, c364, c365, c366, c367, c368, c369, c370, c371, c372, c373, c374, c375, c376, c377, c378, c379, c380, c381, c382, c383, c384, c385, c386, c387, c388, c389, c390, c391, c392, c393, c394, c395, c396, c397, c398, c399, c400;
    char[] ch301, ch302, ch303, ch304, ch305, ch306, ch307, ch308, ch309, ch310, ch311, ch312, ch313, ch314, ch315, ch316, ch317, ch318, ch319, ch320, ch321, ch322, ch323, ch324, ch325, ch326, ch327, ch328, ch329, ch330, ch331, ch332, ch333, ch334, ch335, ch336, ch337, ch338, ch339, ch340, ch341, ch342, ch343, ch344, ch345, ch346, ch347, ch348, ch349, ch350, ch351, ch352, ch353, ch354, ch355, ch356, ch357, ch358, ch359, ch360, ch361, ch362, ch363, ch364, ch365, ch366, ch367, ch368, ch369, ch370, ch371, ch372, ch373, ch374, ch375, ch376, ch377, ch378, ch379, ch380, ch381, ch382, ch383, ch384, ch385, ch386, ch387, ch388, ch389, ch390, ch391, ch392, ch393, ch394, ch395, ch396, ch397, ch398, ch399, ch400;
    int[] temp6, tmp6, c401, c402, c403, c404, c405, c406, c407, c408, c409, c410, c411, c412, c413, c414, c415, c416, c417, c418, c419, c420, c421, c422, c423, c424, c425, c426, c427, c428, c429, c430, c431, c432, c433, c434, c435, c436, c437, c438, c439, c440, c441, c442, c443, c444, c445, c446, c447, c448, c449, c450, c451, c452, c453, c454, c455, c456, c457, c458, c459, c460, c461, c462, c463, c464, c465, c466, c467, c468, c469, c470, c471, c472, c473, c474, c475, c476, c477, c478, c479, c480, c481, c482, c483, c484, c485, c486, c487, c488, c489, c490, c491, c492, c493, c494, c495, c496, c497, c498, c499, c500;
    char[] ch401, ch402, ch403, ch404, ch405, ch406, ch407, ch408, ch409, ch410, ch411, ch412, ch413, ch414, ch415, ch416, ch417, ch418, ch419, ch420, ch421, ch422, ch423, ch424, ch425, ch426, ch427, ch428, ch429, ch430, ch431, ch432, ch433, ch434, ch435, ch436, ch437, ch438, ch439, ch440, ch441, ch442, ch443, ch444, ch445, ch446, ch447, ch448, ch449, ch450, ch451, ch452, ch453, ch454, ch455, ch456, ch457, ch458, ch459, ch460, ch461, ch462, ch463, ch464, ch465, ch466, ch467, ch468, ch469, ch470, ch471, ch472, ch473, ch474, ch475, ch476, ch477, ch478, ch479, ch480, ch481, ch482, ch483, ch484, ch485, ch486, ch487, ch488, ch489, ch490, ch491, ch492, ch493, ch494, ch495, ch496, ch497, ch498, ch499, ch500;
    int[] temp7, tmp7, c501, c502, c503, c504, c505, c506, c507, c508, c509, c510, c511, c512, c513, c514, c515, c516, c517, c518, c519, c520, c521, c522, c523, c524, c525, c526, c527, c528, c529, c530, c531, c532, c533, c534, c535, c536, c537, c538, c539, c540, c541, c542, c543, c544, c545, c546, c547, c548, c549, c550, c551, c552, c553, c554, c555, c556, c557, c558, c559, c560, c561, c562, c563, c564, c565, c566, c567, c568, c569, c570, c571, c572, c573, c574, c575, c576, c577, c578, c579, c580, c581, c582, c583, c584, c585, c586, c587, c588, c589, c590, c591, c592, c593, c594, c595, c596, c597, c598, c599, c600;
    char[] ch501, ch502, ch503, ch504, ch505, ch506, ch507, ch508, ch509, ch510, ch511, ch512, ch513, ch514, ch515, ch516, ch517, ch518, ch519, ch520, ch521, ch522, ch523, ch524, ch525, ch526, ch527, ch528, ch529, ch530, ch531, ch532, ch533, ch534, ch535, ch536, ch537, ch538, ch539, ch540, ch541, ch542, ch543, ch544, ch545, ch546, ch547, ch548, ch549, ch550, ch551, ch552, ch553, ch554, ch555, ch556, ch557, ch558, ch559, ch560, ch561, ch562, ch563, ch564, ch565, ch566, ch567, ch568, ch569, ch570, ch571, ch572, ch573, ch574, ch575, ch576, ch577, ch578, ch579, ch580, ch581, ch582, ch583, ch584, ch585, ch586, ch587, ch588, ch589, ch590, ch591, ch592, ch593, ch594, ch595, ch596, ch597, ch598, ch599, ch600;
    int[] temp8, tmp8, c601, c602, c603, c604, c605, c606, c607, c608, c609, c610, c611, c612, c613, c614, c615, c616, c617, c618, c619, c620, c621, c622, c623, c624, c625, c626, c627, c628, c629, c630, c631, c632, c633, c634, c635, c636, c637, c638, c639, c640, c641, c642, c643, c644, c645, c646, c647, c648, c649, c650, c651, c652, c653, c654, c655, c656, c657, c658, c659, c660, c661, c662, c663, c664, c665, c666, c667, c668, c669, c670, c671, c672, c673, c674, c675, c676, c677, c678, c679, c680, c681, c682, c683, c684, c685, c686, c687, c688, c689, c690, c691, c692, c693, c694, c695, c696, c697, c698, c699, c700;
    char[] ch601, ch602, ch603, ch604, ch605, ch606, ch607, ch608, ch609, ch610, ch611, ch612, ch613, ch614, ch615, ch616, ch617, ch618, ch619, ch620, ch621, ch622, ch623, ch624, ch625, ch626, ch627, ch628, ch629, ch630, ch631, ch632, ch633, ch634, ch635, ch636, ch637, ch638, ch639, ch640, ch641, ch642, ch643, ch644, ch645, ch646, ch647, ch648, ch649, ch650, ch651, ch652, ch653, ch654, ch655, ch656, ch657, ch658, ch659, ch660, ch661, ch662, ch663, ch664, ch665, ch666, ch667, ch668, ch669, ch670, ch671, ch672, ch673, ch674, ch675, ch676, ch677, ch678, ch679, ch680, ch681, ch682, ch683, ch684, ch685, ch686, ch687, ch688, ch689, ch690, ch691, ch692, ch693, ch694, ch695, ch696, ch697, ch698, ch699, ch700;
    int[] temp9, tmp9, c701, c702, c703, c704, c705, c706, c707, c708, c709, c710, c711, c712, c713, c714, c715, c716, c717, c718, c719, c720, c721, c722, c723, c724, c725, c726, c727, c728, c729, c730, c731, c732, c733, c734, c735, c736, c737, c738, c739, c740, c741, c742, c743, c744, c745, c746, c747, c748, c749, c750, c751, c752, c753, c754, c755, c756, c757, c758, c759, c760, c761, c762, c763, c764, c765, c766, c767, c768, c769, c770, c771, c772, c773, c774, c775, c776, c777, c778, c779, c780, c781, c782, c783, c784, c785, c786, c787, c788, c789, c790, c791, c792, c793, c794, c795, c796, c797, c798, c799, c800;
    char[] ch701, ch702, ch703, ch704, ch705, ch706, ch707, ch708, ch709, ch710, ch711, ch712, ch713, ch714, ch715, ch716, ch717, ch718, ch719, ch720, ch721, ch722, ch723, ch724, ch725, ch726, ch727, ch728, ch729, ch730, ch731, ch732, ch733, ch734, ch735, ch736, ch737, ch738, ch739, ch740, ch741, ch742, ch743, ch744, ch745, ch746, ch747, ch748, ch749, ch750, ch751, ch752, ch753, ch754, ch755, ch756, ch757, ch758, ch759, ch760, ch761, ch762, ch763, ch764, ch765, ch766, ch767, ch768, ch769, ch770, ch771, ch772, ch773, ch774, ch775, ch776, ch777, ch778, ch779, ch780, ch781, ch782, ch783, ch784, ch785, ch786, ch787, ch788, ch789, ch790, ch791, ch792, ch793, ch794, ch795, ch796, ch797, ch798, ch799, ch800;
    int[] temp10, tmp10, c801, c802, c803, c804, c805, c806, c807, c808, c809, c810, c811, c812, c813, c814, c815, c816, c817, c818, c819, c820, c821, c822, c823, c824, c825, c826, c827, c828, c829, c830, c831, c832, c833, c834, c835, c836, c837, c838, c839, c840, c841, c842, c843, c844, c845, c846, c847, c848, c849, c850, c851, c852, c853, c854, c855, c856, c857, c858, c859, c860, c861, c862, c863, c864, c865, c866, c867, c868, c869, c870, c871, c872, c873, c874, c875, c876, c877, c878, c879, c880, c881, c882, c883, c884, c885, c886, c887, c888, c889, c890, c891, c892, c893, c894, c895, c896, c897, c898, c899, c900;
    char[] ch801, ch802, ch803, ch804, ch805, ch806, ch807, ch808, ch809, ch810, ch811, ch812, ch813, ch814, ch815, ch816, ch817, ch818, ch819, ch820, ch821, ch822, ch823, ch824, ch825, ch826, ch827, ch828, ch829, ch830, ch831, ch832, ch833, ch834, ch835, ch836, ch837, ch838, ch839, ch840, ch841, ch842, ch843, ch844, ch845, ch846, ch847, ch848, ch849, ch850, ch851, ch852, ch853, ch854, ch855, ch856, ch857, ch858, ch859, ch860, ch861, ch862, ch863, ch864, ch865, ch866, ch867, ch868, ch869, ch870, ch871, ch872, ch873, ch874, ch875, ch876, ch877, ch878, ch879, ch880, ch881, ch882, ch883, ch884, ch885, ch886, ch887, ch888, ch889, ch890, ch891, ch892, ch893, ch894, ch895, ch896, ch897, ch898, ch899, ch900;
    int[] temp11, tmp11, c901, c902, c903, c904, c905, c906, c907, c908, c909, c910, c911, c912, c913, c914, c915, c916, c917, c918, c919, c920, c921, c922, c923, c924, c925, c926, c927, c928, c929, c930, c931, c932, c933, c934, c935, c936, c937, c938, c939, c940, c941, c942, c943, c944, c945, c946, c947, c948, c949, c950, c951, c952, c953, c954, c955, c956, c957, c958, c959, c960, c961, c962, c963, c964, c965, c966, c967, c968, c969, c970, c971, c972, c973, c974, c975, c976, c977, c978, c979, c980, c981, c982, c983, c984, c985, c986, c987, c988, c989, c990, c991, c992, c993, c994, c995, c996, c997, c998, c999, c1000;
    char[] ch901, ch902, ch903, ch904, ch905, ch906, ch907, ch908, ch909, ch910, ch911, ch912, ch913, ch914, ch915, ch916, ch917, ch918, ch919, ch920, ch921, ch922, ch923, ch924, ch925, ch926, ch927, ch928, ch929, ch930, ch931, ch932, ch933, ch934, ch935, ch936, ch937, ch938, ch939, ch940, ch941, ch942, ch943, ch944, ch945, ch946, ch947, ch948, ch949, ch950, ch951, ch952, ch953, ch954, ch955, ch956, ch957, ch958, ch959, ch960, ch961, ch962, ch963, ch964, ch965, ch966, ch967, ch968, ch969, ch970, ch971, ch972, ch973, ch974, ch975, ch976, ch977, ch978, ch979, ch980, ch981, ch982, ch983, ch984, ch985, ch986, ch987, ch988, ch989, ch990, ch991, ch992, ch993, ch994, ch995, ch996, ch997, ch998, ch999, ch1000;
    int[] temp12, tmp12, c1001, c1002, c1003, c1004, c1005, c1006, c1007, c1008, c1009, c1010, c1011, c1012, c1013, c1014, c1015, c1016, c1017, c1018, c1019, c1020, c1021, c1022, c1023, c1024, c1025, c1026, c1027, c1028, c1029, c1030, c1031, c1032, c1033, c1034, c1035, c1036, c1037, c1038, c1039, c1040, c1041, c1042, c1043, c1044, c1045, c1046, c1047, c1048, c1049, c1050, c1051, c1052, c1053, c1054, c1055, c1056, c1057, c1058, c1059, c1060, c1061, c1062, c1063, c1064, c1065, c1066, c1067, c1068, c1069, c1070, c1071, c1072, c1073, c1074, c1075, c1076, c1077, c1078, c1079, c1080, c1081, c1082, c1083, c1084, c1085, c1086, c1087, c1088, c1089, c1090, c1091, c1092, c1093, c1094, c1095, c1096, c1097, c1098, c1099, c1100;
    char[] ch1001, ch1002, ch1003, ch1004, ch1005, ch1006, ch1007, ch1008, ch1009, ch1010, ch1011, ch1012, ch1013, ch1014, ch1015, ch1016, ch1017, ch1018, ch1019, ch1020, ch1021, ch1022, ch1023, ch1024, ch1025, ch1026, ch1027, ch1028, ch1029, ch1030, ch1031, ch1032, ch1033, ch1034, ch1035, ch1036, ch1037, ch1038, ch1039, ch1040, ch1041, ch1042, ch1043, ch1044, ch1045, ch1046, ch1047, ch1048, ch1049, ch1050, ch1051, ch1052, ch1053, ch1054, ch1055, ch1056, ch1057, ch1058, ch1059, ch1060, ch1061, ch1062, ch1063, ch1064, ch1065, ch1066, ch1067, ch1068, ch1069, ch1070, ch1071, ch1072, ch1073, ch1074, ch1075, ch1076, ch1077, ch1078, ch1079, ch1080, ch1081, ch1082, ch1083, ch1084, ch1085, ch1086, ch1087, ch1088, ch1089, ch1090, ch1091, ch1092, ch1093, ch1094, ch1095, ch1096, ch1097, ch1098, ch1099, ch1100;
    int[] temp13, tmp13, c1101, c1102, c1103, c1104, c1105, c1106, c1107, c1108, c1109, c1110, c1111, c1112, c1113, c1114, c1115, c1116, c1117, c1118, c1119, c1120, c1121, c1122, c1123, c1124, c1125, c1126, c1127, c1128, c1129, c1130, c1131, c1132, c1133, c1134, c1135, c1136, c1137, c1138, c1139, c1140, c1141, c1142, c1143, c1144, c1145, c1146, c1147, c1148, c1149, c1150, c1151, c1152, c1153, c1154, c1155, c1156, c1157, c1158, c1159, c1160, c1161, c1162, c1163, c1164, c1165, c1166, c1167, c1168, c1169, c1170, c1171, c1172, c1173, c1174, c1175, c1176, c1177, c1178, c1179, c1180, c1181, c1182, c1183, c1184, c1185, c1186, c1187, c1188, c1189, c1190, c1191, c1192, c1193, c1194, c1195, c1196, c1197, c1198, c1199, c1200;
    char[] ch1101, ch1102, ch1103, ch1104, ch1105, ch1106, ch1107, ch1108, ch1109, ch1110, ch1111, ch1112, ch1113, ch1114, ch1115, ch1116, ch1117, ch1118, ch1119, ch1120, ch1121, ch1122, ch1123, ch1124, ch1125, ch1126, ch1127, ch1128, ch1129, ch1130, ch1131, ch1132, ch1133, ch1134, ch1135, ch1136, ch1137, ch1138, ch1139, ch1140, ch1141, ch1142, ch1143, ch1144, ch1145, ch1146, ch1147, ch1148, ch1149, ch1150, ch1151, ch1152, ch1153, ch1154, ch1155, ch1156, ch1157, ch1158, ch1159, ch1160, ch1161, ch1162, ch1163, ch1164, ch1165, ch1166, ch1167, ch1168, ch1169, ch1170, ch1171, ch1172, ch1173, ch1174, ch1175, ch1176, ch1177, ch1178, ch1179, ch1180, ch1181, ch1182, ch1183, ch1184, ch1185, ch1186, ch1187, ch1188, ch1189, ch1190, ch1191, ch1192, ch1193, ch1194, ch1195, ch1196, ch1197, ch1198, ch1199, ch1200;
    int[] temp14, tmp14, c1201, c1202, c1203, c1204, c1205, c1206, c1207, c1208, c1209, c1210, c1211, c1212, c1213, c1214, c1215, c1216, c1217, c1218, c1219, c1220, c1221, c1222, c1223, c1224, c1225, c1226, c1227, c1228, c1229, c1230, c1231, c1232, c1233, c1234, c1235, c1236, c1237, c1238, c1239, c1240, c1241, c1242, c1243, c1244, c1245, c1246, c1247, c1248, c1249, c1250, c1251, c1252, c1253, c1254, c1255, c1256, c1257, c1258, c1259, c1260, c1261, c1262, c1263, c1264, c1265, c1266, c1267, c1268, c1269, c1270, c1271, c1272, c1273, c1274, c1275, c1276, c1277, c1278, c1279, c1280, c1281, c1282, c1283, c1284, c1285, c1286, c1287, c1288, c1289, c1290, c1291, c1292, c1293, c1294, c1295, c1296, c1297, c1298, c1299, c1300;
    char[] ch1201, ch1202, ch1203, ch1204, ch1205, ch1206, ch1207, ch1208, ch1209, ch1210, ch1211, ch1212, ch1213, ch1214, ch1215, ch1216, ch1217, ch1218, ch1219, ch1220, ch1221, ch1222, ch1223, ch1224, ch1225, ch1226, ch1227, ch1228, ch1229, ch1230, ch1231, ch1232, ch1233, ch1234, ch1235, ch1236, ch1237, ch1238, ch1239, ch1240, ch1241, ch1242, ch1243, ch1244, ch1245, ch1246, ch1247, ch1248, ch1249, ch1250, ch1251, ch1252, ch1253, ch1254, ch1255, ch1256, ch1257, ch1258, ch1259, ch1260, ch1261, ch1262, ch1263, ch1264, ch1265, ch1266, ch1267, ch1268, ch1269, ch1270, ch1271, ch1272, ch1273, ch1274, ch1275, ch1276, ch1277, ch1278, ch1279, ch1280, ch1281, ch1282, ch1283, ch1284, ch1285, ch1286, ch1287, ch1288, ch1289, ch1290, ch1291, ch1292, ch1293, ch1294, ch1295, ch1296, ch1297, ch1298, ch1299, ch1300;
    int[] temp15, tmp15, c1301, c1302, c1303, c1304, c1305, c1306, c1307, c1308, c1309, c1310, c1311, c1312, c1313, c1314, c1315, c1316, c1317, c1318, c1319, c1320, c1321, c1322, c1323, c1324, c1325, c1326, c1327, c1328, c1329, c1330, c1331, c1332, c1333, c1334, c1335, c1336, c1337, c1338, c1339, c1340, c1341, c1342, c1343, c1344, c1345, c1346, c1347, c1348, c1349, c1350, c1351, c1352, c1353, c1354, c1355, c1356, c1357, c1358, c1359, c1360, c1361, c1362, c1363, c1364, c1365, c1366, c1367, c1368, c1369, c1370, c1371, c1372, c1373, c1374, c1375, c1376, c1377, c1378, c1379, c1380, c1381, c1382, c1383, c1384, c1385, c1386, c1387, c1388, c1389, c1390, c1391, c1392, c1393, c1394, c1395, c1396, c1397, c1398, c1399, c1400;
    char[] ch1301, ch1302, ch1303, ch1304, ch1305, ch1306, ch1307, ch1308, ch1309, ch1310, ch1311, ch1312, ch1313, ch1314, ch1315, ch1316, ch1317, ch1318, ch1319, ch1320, ch1321, ch1322, ch1323, ch1324, ch1325, ch1326, ch1327, ch1328, ch1329, ch1330, ch1331, ch1332, ch1333, ch1334, ch1335, ch1336, ch1337, ch1338, ch1339, ch1340, ch1341, ch1342, ch1343, ch1344, ch1345, ch1346, ch1347, ch1348, ch1349, ch1350, ch1351, ch1352, ch1353, ch1354, ch1355, ch1356, ch1357, ch1358, ch1359, ch1360, ch1361, ch1362, ch1363, ch1364, ch1365, ch1366, ch1367, ch1368, ch1369, ch1370, ch1371, ch1372, ch1373, ch1374, ch1375, ch1376, ch1377, ch1378, ch1379, ch1380, ch1381, ch1382, ch1383, ch1384, ch1385, ch1386, ch1387, ch1388, ch1389, ch1390, ch1391, ch1392, ch1393, ch1394, ch1395, ch1396, ch1397, ch1398, ch1399, ch1400;
    int[] temp16, tmp16, c1401, c1402, c1403, c1404, c1405, c1406, c1407, c1408, c1409, c1410, c1411, c1412, c1413, c1414, c1415, c1416, c1417, c1418, c1419, c1420, c1421, c1422, c1423, c1424, c1425, c1426, c1427, c1428, c1429, c1430, c1431, c1432, c1433, c1434, c1435, c1436, c1437, c1438, c1439, c1440, c1441, c1442, c1443, c1444, c1445, c1446, c1447, c1448, c1449, c1450, c1451, c1452, c1453, c1454, c1455, c1456, c1457, c1458, c1459, c1460, c1461, c1462, c1463, c1464, c1465, c1466, c1467, c1468, c1469, c1470, c1471, c1472, c1473, c1474, c1475, c1476, c1477, c1478, c1479, c1480, c1481, c1482, c1483, c1484, c1485, c1486, c1487, c1488, c1489, c1490, c1491, c1492, c1493, c1494, c1495, c1496, c1497, c1498, c1499, c1500;
    char[] ch1401, ch1402, ch1403, ch1404, ch1405, ch1406, ch1407, ch1408, ch1409, ch1410, ch1411, ch1412, ch1413, ch1414, ch1415, ch1416, ch1417, ch1418, ch1419, ch1420, ch1421, ch1422, ch1423, ch1424, ch1425, ch1426, ch1427, ch1428, ch1429, ch1430, ch1431, ch1432, ch1433, ch1434, ch1435, ch1436, ch1437, ch1438, ch1439, ch1440, ch1441, ch1442, ch1443, ch1444, ch1445, ch1446, ch1447, ch1448, ch1449, ch1450, ch1451, ch1452, ch1453, ch1454, ch1455, ch1456, ch1457, ch1458, ch1459, ch1460, ch1461, ch1462, ch1463, ch1464, ch1465, ch1466, ch1467, ch1468, ch1469, ch1470, ch1471, ch1472, ch1473, ch1474, ch1475, ch1476, ch1477, ch1478, ch1479, ch1480, ch1481, ch1482, ch1483, ch1484, ch1485, ch1486, ch1487, ch1488, ch1489, ch1490, ch1491, ch1492, ch1493, ch1494, ch1495, ch1496, ch1497, ch1498, ch1499, ch1500;
    int[] temp17, tmp17, c1501, c1502, c1503, c1504, c1505, c1506, c1507, c1508, c1509, c1510, c1511, c1512, c1513, c1514, c1515, c1516, c1517, c1518, c1519, c1520, c1521, c1522, c1523, c1524, c1525, c1526, c1527, c1528, c1529, c1530, c1531, c1532, c1533, c1534, c1535, c1536, c1537, c1538, c1539, c1540, c1541, c1542, c1543, c1544, c1545, c1546, c1547, c1548, c1549, c1550, c1551, c1552, c1553, c1554, c1555, c1556, c1557, c1558, c1559, c1560, c1561, c1562, c1563, c1564, c1565, c1566, c1567, c1568, c1569, c1570, c1571, c1572, c1573, c1574, c1575, c1576, c1577, c1578, c1579, c1580, c1581, c1582, c1583, c1584, c1585, c1586, c1587, c1588, c1589, c1590, c1591, c1592, c1593, c1594, c1595, c1596, c1597, c1598, c1599, c1600;
    char[] ch1501, ch1502, ch1503, ch1504, ch1505, ch1506, ch1507, ch1508, ch1509, ch1510, ch1511, ch1512, ch1513, ch1514, ch1515, ch1516, ch1517, ch1518, ch1519, ch1520, ch1521, ch1522, ch1523, ch1524, ch1525, ch1526, ch1527, ch1528, ch1529, ch1530, ch1531, ch1532, ch1533, ch1534, ch1535, ch1536, ch1537, ch1538, ch1539, ch1540, ch1541, ch1542, ch1543, ch1544, ch1545, ch1546, ch1547, ch1548, ch1549, ch1550, ch1551, ch1552, ch1553, ch1554, ch1555, ch1556, ch1557, ch1558, ch1559, ch1560, ch1561, ch1562, ch1563, ch1564, ch1565, ch1566, ch1567, ch1568, ch1569, ch1570, ch1571, ch1572, ch1573, ch1574, ch1575, ch1576, ch1577, ch1578, ch1579, ch1580, ch1581, ch1582, ch1583, ch1584, ch1585, ch1586, ch1587, ch1588, ch1589, ch1590, ch1591, ch1592, ch1593, ch1594, ch1595, ch1596, ch1597, ch1598, ch1599, ch1600;
    int[] temp18, tmp18, c1601, c1602, c1603, c1604, c1605, c1606, c1607, c1608, c1609, c1610, c1611, c1612, c1613, c1614, c1615, c1616, c1617, c1618, c1619, c1620, c1621, c1622, c1623, c1624, c1625, c1626, c1627, c1628, c1629, c1630, c1631, c1632, c1633, c1634, c1635, c1636, c1637, c1638, c1639, c1640, c1641, c1642, c1643, c1644, c1645, c1646, c1647, c1648, c1649, c1650, c1651, c1652, c1653, c1654, c1655, c1656, c1657, c1658, c1659, c1660, c1661, c1662, c1663, c1664, c1665, c1666, c1667, c1668, c1669, c1670, c1671, c1672, c1673, c1674, c1675, c1676, c1677, c1678, c1679, c1680, c1681, c1682, c1683, c1684, c1685, c1686, c1687, c1688, c1689, c1690, c1691, c1692, c1693, c1694, c1695, c1696, c1697, c1698, c1699, c1700;
    char[] ch1601, ch1602, ch1603, ch1604, ch1605, ch1606, ch1607, ch1608, ch1609, ch1610, ch1611, ch1612, ch1613, ch1614, ch1615, ch1616, ch1617, ch1618, ch1619, ch1620, ch1621, ch1622, ch1623, ch1624, ch1625, ch1626, ch1627, ch1628, ch1629, ch1630, ch1631, ch1632, ch1633, ch1634, ch1635, ch1636, ch1637, ch1638, ch1639, ch1640, ch1641, ch1642, ch1643, ch1644, ch1645, ch1646, ch1647, ch1648, ch1649, ch1650, ch1651, ch1652, ch1653, ch1654, ch1655, ch1656, ch1657, ch1658, ch1659, ch1660, ch1661, ch1662, ch1663, ch1664, ch1665, ch1666, ch1667, ch1668, ch1669, ch1670, ch1671, ch1672, ch1673, ch1674, ch1675, ch1676, ch1677, ch1678, ch1679, ch1680, ch1681, ch1682, ch1683, ch1684, ch1685, ch1686, ch1687, ch1688, ch1689, ch1690, ch1691, ch1692, ch1693, ch1694, ch1695, ch1696, ch1697, ch1698, ch1699, ch1700;
    int[] temp19, tmp19, c1701, c1702, c1703, c1704, c1705, c1706, c1707, c1708, c1709, c1710, c1711, c1712, c1713, c1714, c1715, c1716, c1717, c1718, c1719, c1720, c1721, c1722, c1723, c1724, c1725, c1726, c1727, c1728, c1729, c1730, c1731, c1732, c1733, c1734, c1735, c1736, c1737, c1738, c1739, c1740, c1741, c1742, c1743, c1744, c1745, c1746, c1747, c1748, c1749, c1750, c1751, c1752, c1753, c1754, c1755, c1756, c1757, c1758, c1759, c1760, c1761, c1762, c1763, c1764, c1765, c1766, c1767, c1768, c1769, c1770, c1771, c1772, c1773, c1774, c1775, c1776, c1777, c1778, c1779, c1780, c1781, c1782, c1783, c1784, c1785, c1786, c1787, c1788, c1789, c1790, c1791, c1792, c1793, c1794, c1795, c1796, c1797, c1798, c1799, c1800;
    char[] ch1701, ch1702, ch1703, ch1704, ch1705, ch1706, ch1707, ch1708, ch1709, ch1710, ch1711, ch1712, ch1713, ch1714, ch1715, ch1716, ch1717, ch1718, ch1719, ch1720, ch1721, ch1722, ch1723, ch1724, ch1725, ch1726, ch1727, ch1728, ch1729, ch1730, ch1731, ch1732, ch1733, ch1734, ch1735, ch1736, ch1737, ch1738, ch1739, ch1740, ch1741, ch1742, ch1743, ch1744, ch1745, ch1746, ch1747, ch1748, ch1749, ch1750, ch1751, ch1752, ch1753, ch1754, ch1755, ch1756, ch1757, ch1758, ch1759, ch1760, ch1761, ch1762, ch1763, ch1764, ch1765, ch1766, ch1767, ch1768, ch1769, ch1770, ch1771, ch1772, ch1773, ch1774, ch1775, ch1776, ch1777, ch1778, ch1779, ch1780, ch1781, ch1782, ch1783, ch1784, ch1785, ch1786, ch1787, ch1788, ch1789, ch1790, ch1791, ch1792, ch1793, ch1794, ch1795, ch1796, ch1797, ch1798, ch1799, ch1800;
    int[] temp20, tmp20, c1801, c1802, c1803, c1804, c1805, c1806, c1807, c1808, c1809, c1810, c1811, c1812, c1813, c1814, c1815, c1816, c1817, c1818, c1819, c1820, c1821, c1822, c1823, c1824, c1825, c1826, c1827, c1828, c1829, c1830, c1831, c1832, c1833, c1834, c1835, c1836, c1837, c1838, c1839, c1840, c1841, c1842, c1843, c1844, c1845, c1846, c1847, c1848, c1849, c1850, c1851, c1852, c1853, c1854, c1855, c1856, c1857, c1858, c1859, c1860, c1861, c1862, c1863, c1864, c1865, c1866, c1867, c1868, c1869, c1870, c1871, c1872, c1873, c1874, c1875, c1876
```

Vetical String : Java : BlueJ

Objective:

The Program prints each word vertically of the given input String. Each word is picked up and transfers it into an Array and later prints with the funcion PrintVertical(). The Program first calculates the maximum length of the string and no. of words and creates the Array in the max length x no.of words order. Thus Storing Each Character and spaces if word finishes.

BlueJ Program Screenshot:



Java Program Source Code:

```
/**
 * The Program Prints Each word of the String in an Vertical Format.
 * © SHANTANU KHAN
 * @ shantanukhan1995@gmail.com
 * @website 0code.blogspot.com
 * Program Type : BlueJ Program - Java
 */
import java.io.*;
import java.util.*;
public class Vert_Str
{
 BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
 String s=new String(); // FOR THAKING THE INPUT FROM THE USER
 String sa[]; // FOR STORING EACH WORD IN A 1D ARRAY
 int count=0,maxwl=0; // count STORES THE INDEX OF EACH WORD
 //maxwl STORES THE MAXIMUM LENGTH OF THE WORDS

 void input()throws Exception // TAKING INPUT
 {
     System.out.print("ENTER THE SENTENCE TO PRINT AS VERTICAL STRING :");
     s=br.readLine();
     sa=new String[s.length()];
 }

 void ArrayStore() // STORING WORDS IN THE ARRAY
 {
     Scanner sc=new Scanner(s);
     while(sc.hasNext())
     {
         sa[count++]=sc.next();
         if(sa[count-1].length()>maxwl)
           maxwl=sa[count-1].length();
     }
 }

 void PrintVertical() // PRINTING THE ARRAY VERTICALLY
 {
     System.out.println("THE VERTICAL STRING IS :\n");
     for(int i=0;i<maxwl;i++)
     {
         for(int j=0;j<count;j++)
         {
             if(i<sa[j].length())
                  System.out.print(sa[j].charAt(i)+" ");
             else
                  System.out.print("  ");
         }
         System.out.println();
     }
 }

 public static void main(String args[])throws Exception
 {
     Vert_Str obj=new Vert_Str(); // CREATING OBJECT
     obj.input();
     obj.ArrayStore();
     obj.PrintVertical();
 }
}
```