Submitted By

Name: Likhan Sarker

ID: 191-15-12958

JOR (int 3=0; 32n-1; 3+4) void Print Armoy (intx[]) for (inticos icm-1; itt) 4 (ati) >a[3+1]) のはりこのじまれり、 a [34] - \$ lag; void bubble Sort (intal]) int flag-a(3); int m= a. length; class Bubblesont Com. Company; @ Bubble Sort Packoge

2 motern . out. print In ("Sonded Armayilly Bubble Lord ab-men Bubble Lort(); Public static roid main (string angr [] Existem. out. Print (x [i] +"); int crease []={12,8,7,5,2]; 06. Print Array (armay); ab bubble sont (annay); dor (inti-0; icm; ++i) System. out. Printh (); int m = 26. longth;

Pertormanne (d/m). Average care Pertormance HORDA Carre PerchoPlemonce & (may) Bent came

Bubble Sort AHOrithm;

```
Public static Noid main (string angre)
                                                                             Public Statio int Searcet (intal ] intal
                                                                                                                                                                                                                                                                                                        intoc[]={5,25,90,293;
                                                                                                                                    don (int 1-03 12m; it)
                                             Claros Limeartératich
                                                                                                                                                                        14 (a[i]==~)
                                                                                                                int m= a. length;
                                                                                                                                                                                                                                                                                                                                 int. 1290;
                                                                                                                                                                                                                                   Return -1;
                                                                                                                                                                                                return i;
                     Com. Company;
Package
```

@ Linear Search

available in arrayms Eystem. out. Print (" Element Lound at index " + Trepult); Syptem. out. Print (" Element is not int repult = Sourceh (x,v); 17 (Repult == -1) elpe

(E) 0 (F) 0 Worrat Care perdormance (a) I'mean Seatter Alganithm; Average Bent

for (int step = 1; Step Caize; step +1)[while (33= 6\$ \$ 4 key Larter ay (53)) Void inpertion Sort (intaral ay [3) [attray [3+1] - attray [3]; int Size-anray. length; int key = arter any [step]; Import Jana. Util. ATTRAYA; int 2- Step -1; clars Inseption Soutf @ Impertion Sort Com. Company; Packoge

```
Eystem. and. Println (Arm cyp. String last
                                                                                                                                       Insertion Sortin - mea Impertion Sortis
                                                                                                                                                                                                    Extratem out Print In ("Souted Antery is
                                                                                                                                                                                                                                      Accembing order. 4);
                                                                    Public Static void main (String arren []}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (2m) D.
                                                                                                                                                                                                                                                                                                                                                                                       Worldt Cane perchorimance a (m2)
                                                                                                    int [] data = {9,$, 1,9,3};
                                                                                                                                                                      in sertion Eart (doda);
                                                                                                                                                                                                                                                                                                                                                    Insertion Sont Aborithm:
array[3+1]= key;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AVETORE
```

Public static void main Estring angor Experient and Print (a Ender Armay Size); Entern , out. Print ("Enter Atition Elementi"); Scannet soon - new Soon (Syntem.in); int arr [] - new int [so]; import Java, util, Sconner; Size for (1=0,1 Csize; 1++) Size = Sam. next Int (1) int size, i, J, temp; Public claps selection @ sekection Sort Com. Company; Package

Extern out. Print ("Sorting ATTROY Uping Schedien Sort Technique .. Ini); Son (3- 1+1; 3 26ige; 34+) ORR [1] = Soon. mext Int (); ann (3) = 4 cmp; arre[i] = arre(1); dor (1=0; 128ize; 14+) if Carre [i] > OATIE[J] temp= attot [1];

Eyphem out. Print ("Now the Annay after Eyptem. out Print (art [i] + "); Sorting in: (mi); For (1=0; 1 <512e; 14+)

Selection Sort Algerithm;

Worret Case Personnance a (mi) 0(35) (w) 0 Bent L Average

int ting, int last, int tery). Exotem. Out. Printh (Element in Lound Public Static roid binary (int arre [] index: 4+ mid); gelocit (arrecomid) == keyl Clain Binary Search Example? int mid - (first + land) 12; while (firent <= last) of it Carere [mid +1; @ Bimarry Searich

inid = (5inot + lant) 12; lant=mid-1; break; geloef.

Exotem. But Print In ("Element is not boundily Public static void main (string oright) binarry Seatteth (attt, 13, lant, per); int ann ()={10,20,30,90,50}; int lant = arth. length-1; (tan/ tentit) {! int bey - 30;

(ropor) S Worrot care perden monne. 6[log n) (3)0 Binary Seanch Abaruthm. Bent L Average