# Pseudocode Explanation Worksheet

Look at the Pseudocode and explain what is happening in the Explanation box and see if you can name the algorithms:

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| **Pseudocode** | **Explanation** |
| repeat  swapflag = false  for count = 1 to n - 1  if bubbleitem[count]>bubbleitem[count + 1] then  temp = bubbleitem[count]  bubbleitem[count] = bubbleitem[count + 1]  bubbleitem[count + 1] = temp  swapflag = true  end if  next  n = n - 1  until swapflag = false or n = 1 |  |
| for outerloop = 1 to arraylength - 1  temp = item[outerloop]  innerloop = outerloop  while (innerloop > 0 and item[innerloop - 1] >= temp)  item[innerloop] = item[innerloop - 1]  innerloop = innerloop - 1  end while  item[innerloop] = temp  next outerloop |  |

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| for outerloop = 0 to arraylength - 2  minvalue = outerloop  for innerloop = outerloop + 1 to arraylength - 1  if item[innerloop] < item[minvalue] then minvalue = innerloop  next innerloop  temp = item[outerloop]  item[outerloop] = item[minvalue]  item[minvalue] = temp  next outerloop |  |
| h = 1  while (h<=arraylength/3)  h = h \* 3 +1  end while  while (h > 0)  for outerloop = h to arraylength - 1  temp = item[outerloop]  innerloop = outerloop  while (innerloop > h - 1 and item[innerloop - h] >= temp)  item[innerloop] = item[innerloop - h]  innerloop = innerloop - h  end while  item[innerloop] = temp  next outerloop  h = (h - 1)/3  end while |  |

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| open the file with name n for input  if(the file couldn't be opened)  report the error  return  //end if  while( get the next character)  output the next character  //end while  close the file  end algorithm |  |
| if(a<0 OR e<=0)  throw an error  //end if  set x=0.5\*a.  set y=0. // here y <= sqrt(a) <= x  while( abs(x-y)>e )  // here y <= sqrt(a) <= x  set m = (x+y)\*0.5  if( m\*m < a)  // here m <= sqrt(a) <= x  set y=m  else  // here y <= sqrt(a) <= m  set x=m  //end if  //end while  return y. |  |
| if( x < 0 OR y < 0)  throw an error  exit  //end if  set integer z = 0.  for( integer i = 1 to y)  set z = z + x  //end for  return z |  |
| for x = 1 to 10  for y = 1 to 10  if gameboard[x][y] = 0  do nothing  else  call thecall(x, y) (recursive method)  increment counter  end if  end for  end for |  |

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