

```

// Searches the file dataFile for the record whose search key equals searchKey.
// Returns the record if found, else throws NotFoundException.
getItem(indexFile: File, dataFile: File,
        searchKey: KeyType): ItemType

    if (no blocks are left in indexFile to read)
        throw NotFoundException
    else
    {
        // Read the middle block of indexfile into object buf
        mid = number of middle block of indexFile
        buf.readBlock(indexFile, mid)

        if ((searchKey >= (buf.getRecord(0)).getKey()) &&
            (searchKey <= (buf.getRecord(indexrecordsPerBlock-1)).getKey()))
        {
            // Desired block of index file found
            Search buf for index file record whose key value equals searchKey
            if (index record buf.getRecord(j) is found)
            {
                blockNum = number of the data-file block to which buf.getRecord(j) points
                data.readBlock(dataFile, blockNum)
                Find data record data.getRecord(k) whose search key equals searchKey
                return data.getRecord(k)
            }

            else
                throw NotFoundException
        }

        else if (indexFile is one block in size)
            throw NotFoundException // No more blocks in file

        // Else search appropriate half of index file
        else if (searchKey < (buf.getRecord(0)).getKey())
            return getItem(first half of indexFile, dataFile,
                searchKey)
        else
            return getItem(second half of indexFile, dataFile,
                searchKey)
    }
}

```