Advanced Search Algorithm

get_filename()

  GET filename

  RETURN filename

read_file(filename)

  data ← READ filename

  RETURN data

get_keyword()

  GET keyword

  RETURN keyword

search_for_keyword(data, keyword)

  length_of_data ← len(data)

  IF(length_of_data / 2 != keyword):

    search_for_keyword(first_half_of_data, keyword)

    search_for_keyword(second_half_of_data, keyword)

  IF(length_of_data / 2 == keyword)

    RETURN True

  ELSE

    RETURN False

main()

  filename = get_filename()

  data = read_file(filename)

  keyword = get_keyword()

  IF search_for_keyword == True

    PUT "The word exists!"

  ELSE

PUT "The word doesn't exist"

main()