A page displaying a list of content gets longer as the amount of content grows. Pagination is the technique of spreading that content across multiple pages.

The goal of pagination is to create multiple pages (from a single template) that show a limited number of items.

Each page will query GraphQL for those specific items.

The information needed to query for those specific items (i.e. values for limit and skip) will come from the 
context that is added when creating pages in gatsby-node.

## **Example**

```
import React from "react"
import { graphql } from "gatsby"
import Layout from "../components/layout"
export default class BlogList extends React.Component {
 render() {
   const posts = this.props.data.allMarkdownRemark.edges
   return (
     <Layout>
       {posts.map(({ node }) => {
         const title = node.frontmatter.title || node.fields.slug
         return <div key={node.fields.slug}>{title}</div>
       })}
     </Layout>
   )
 }
}
export const blogListQuery = graphql`
// highlight-start
 query blogListQuery($skip: Int!, $limit: Int!) {
   allMarkdownRemark(
      sort: { fields: [frontmatter date], order: DESC }
     limit: $limit
     skip: $skip
   ) {
// highlight-end
     edges {
       node {
          fields {
           slug
         frontmatter {
           title
         }
       }
    }
```

}

```
const path = require("path")
const { createFilePath } = require("gatsby-source-filesystem")
exports.createPages = async ({ graphql, actions, reporter }) => {
 const { createPage } = actions
  const result = await graphql(
       allMarkdownRemark(
         sort: { fields: [frontmatter date], order: DESC }
         limit: 1000
         edges {
           node {
            fields {
              slug
           }
 if (result.errors) {
   reporter.panicOnBuild(`Error while running GraphQL query.`)
   return
  }
 // ...
 // Create blog-list pages
 // highlight-start
 const posts = result.data.allMarkdownRemark.edges
 const postsPerPage = 6
 const numPages = Math.ceil(posts.length / postsPerPage)
 Array.from({ length: numPages }).forEach(( , i) => {
   createPage({
     path: i === 0 ? `/blog` : `/blog/${i + 1}`,
      component: path.resolve("./src/templates/blog-list-template.js"),
     context: {
       limit: postsPerPage,
       skip: i * postsPerPage,
       numPages,
       currentPage: i + 1,
     },
```

```
})
})
// highlight-end
}

exports.onCreateNode = ({ node, actions, getNode }) => {
  const { createNodeField } = actions
  if (node.internal.type === `MarkdownRemark`) {
    const value = createFilePath({ node, getNode })
    createNodeField({
      name: `slug`,
      node,
      value,
    })
}
```

The code above will create a number of pages based on the total number of posts. Each page will list postsPerPage (6) posts, until there are less than postsPerPage (6) posts left. The path for the first page is /blog , following pages will have a path of the form: /blog/2 , /blog/3 , etc.

## Other resources

- Follow this <u>step-by-step tutorial</u> to add links to the previous/next page and the traditional page-navigation at the bottom of the page
- See <u>gatsby-paginated-blog (demo)</u> for an extension of the official <u>gatsby-starter-blog</u> with pagination in place