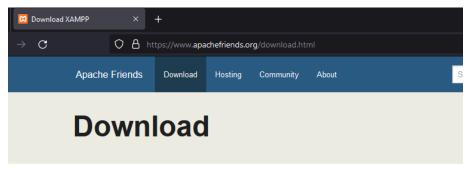
## **Experiment No. 1(A)**

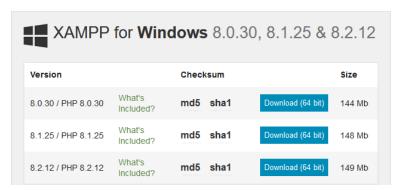
**Aim:** To develop a website and host it on local machine or virtual machine and Hosting a static website using Amazon S3 Bucket

## 1. To develop a website and host it on your local machine on a VM using XAMPP

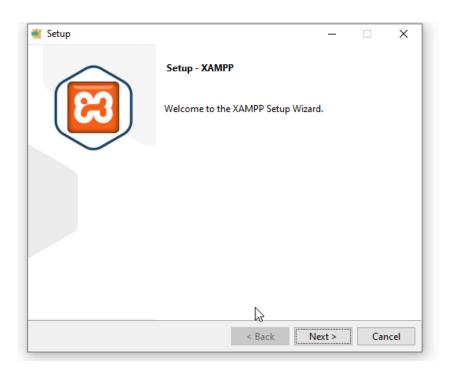
1) Goto official website of XAMPP and download the software as per your OS



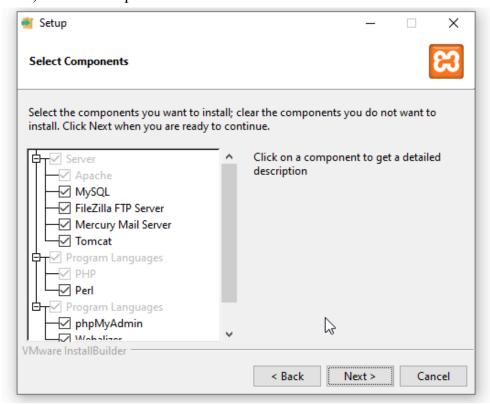
XAMPP is an easy to install Apache distribution containing MariaDB, PHP, and Perl. Just download and start the installer. It's that easy. Installers created using InstallBuilder.



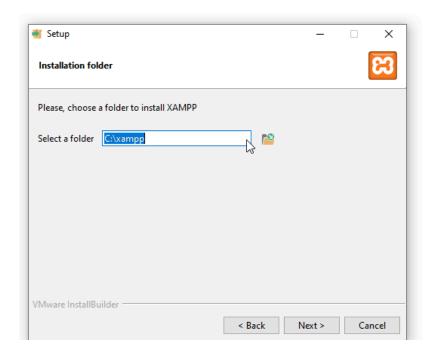
2) After Downloading, open it for installation, Click on next



3) Select components to install



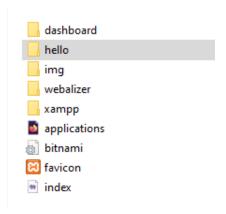
4) Select installation location, and confirm it



5) After installation, goto folder where XAMPP is installed, go to htdocs



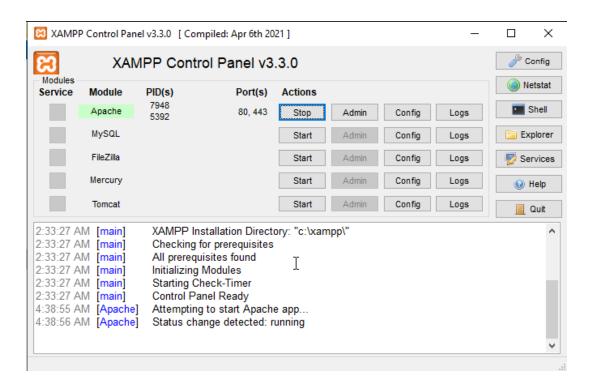
6) Create new folder named anything we want our URI to be.



7) Create a file index.php and paste the following code.

```
*hello.php - Notepad
                                                                                                             ×
File Edit Format View Help
   <title>Hello World</title>
   <style>
       body {
           display: flex;
           justify-content: center;
           align-items: center;
           height: 100vh;
           background-color: #282c34;
           margin: 0;
           font-family: Arial, sans-serif;
           color: white;
       h1 {
           font-size: 4rem;
           color: #61dafb;
           text-shadow: 2px 2px 5px rgba(0, 0, 0, 0.3);
   </style>
</head>
<body>
   <h1>Hello, World!</h1>
</body>
</html>";
?>
                                                                                  100% Windows (CRLF)
```

8) Now go to XAMPP control panel and start Apache server

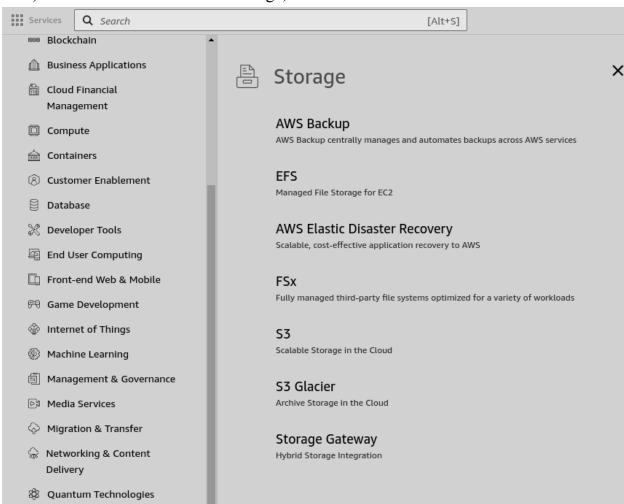


9) Now open browser and enter <a href="http://localhost/folder\_name">http://localhost/folder\_name</a>. This will open webpage locally on our machine



## 2. Hosting a static website on Amazon S3

1) Go to services then under Storage, select S3



2) Create a new bucket



3) Enter Name of the bucket

General configuration
AWS Region
Asia Pacific (Mumbai) ap-south-1
Bucket name Info
host-web-alok
Bucket name must be unique within the global namespace and follow the bucket naming rules. See rules for bucket naming
Copy settings from existing bucket - optional
Only the bucket settings in the following configuration are copied.
Choose bucket
Format: s3://bucket/prefix

4) Disable "Block all public access" to make the contents of bucket publicly accessible

## Block Public Access settings for this bucket Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. Learn more 🔀 Block all public access Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another. Block public access to buckets and objects granted through new access control lists (ACLs) S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs. 🔝 Block public access to buckets and objects granted through *any* access control lists (ACLs) S3 will ignore all ACLs that grant public access to buckets and objects. $_{-}$ $\square$ Block public access to buckets and objects granted through *new* public bucket or access point policies S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources. Block public and cross-account access to buckets and objects through *any* public bucket or access point S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

5) Leaving the remaining configuration to it's default, click on Create Bucket



6) A new bucket will be created



7) Now to host a static web page, open the bucket we created, goto Properties, edit "Static Web hosting settings"



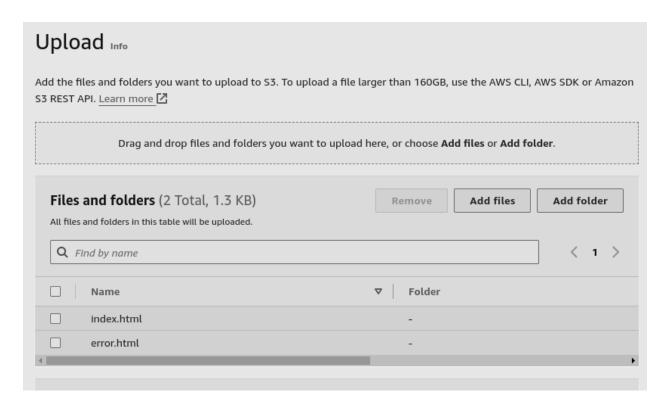
8) Enable Static web Hosting



9) After enabling, we need to enter the names of files two files, one for main file that would be displayed when page loads and the other when some error occurs. Name those files and save it



10) After naming, go to objects and upload the files you mentioned in the static web hosting settings page



11) Now to make sure our page is accessible to public, we need to change bucket policy. To change it, go to permissions and edit Bucket policy.

Change resource arn as per your bucket name

```
Policy
    1
    2 ♥ {
         "Version": "2012-10-17",
    3
        "Statement": [
   5 ₩
    6
            "Sid": "PublicReadGetObject",
           "Effect": "Allow",
   7
            "Principal": {
   8 🔻
             "AWS": "*"
   9
           },
   10
            "Action": "s3:GetObject",
   11
            "Resource": "arn:aws:s3:::host-web-alok/*"
   13
   14
        ]
   15 }
```

12) Now we can go to home page of our bucket and our static page will be loaded

