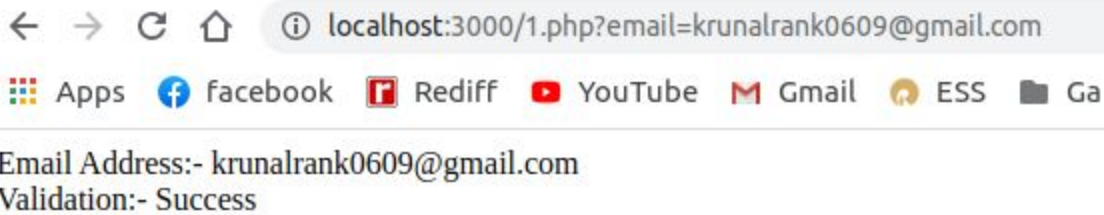


**Software Tools 3**  
**Assignment 4**  
**U18CO081 Krunal Rank**

**Question 1: Write a PHP program to validate email using a user-defined function.**

```
<?php
    if(!isset($_GET["email"])){
        echo "Please enter a valid email address!";
        return;
    }
    $email = $_GET["email"];
    if(filter_var($email,FILTER_VALIDATE_EMAIL)){
        echo "Email Address:- $email
<br>Validation:- Success<br>";
        return;
    }

    echo "Email Address:- $email<br>Validation:- Failed<br>";
?>
```



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/1.php?email=krunalrank0609@gmail.com'. Below the address bar is a navigation bar with icons for 'Apps', 'facebook', 'Rediff', 'YouTube', 'Gmail', 'ESS', and 'Ga'. The main content area of the browser displays the output of the PHP script: 'Email Address:- krunalrank0609@gmail.com' followed by 'Validation:- Success' on the next line.

← → ↻ 🏠 ⓘ localhost:3000/1.php?email=krunalrank0609@gmail.com

📱 Apps 📘 facebook 📺 Rediff 📺 YouTube 📧 Gmail 🕒 ESS 📁 Ga

Email Address:- krunalrank0609@gmail.com  
Validation:- Success

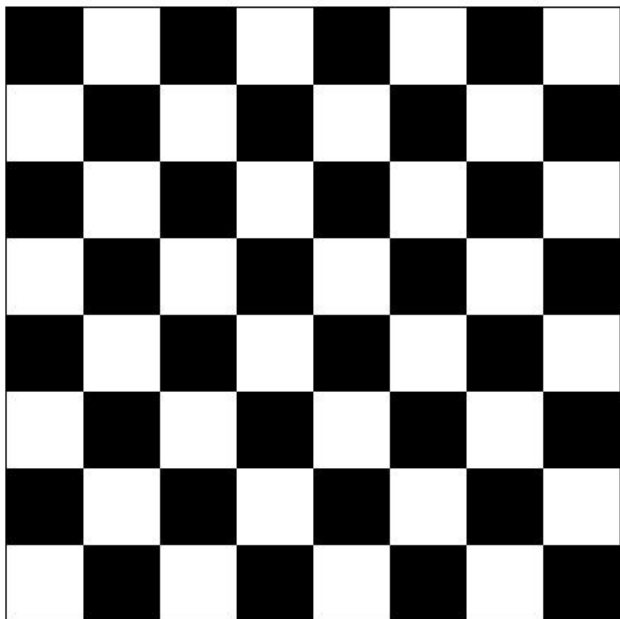
## Question 2: Write a program to create a Chess Board in PHP.

### Answer 2:

```
<?php
echo '
<html>
  <head>
    <title>
      Chessboard
    </title>
  </head>
  <style>
    .black{
      height: 50px;
      width: 50px;
      display: flex;
      background-color: black;
    }
    .white{
      height: 50px;
      width: 50px;
      display: flex;
      background-color: white;
    }
    .chessboard{
      display:inline-block;
      border: 1px solid black;
      margin: 0 auto;
    }
    .row{
      display:flex;
    }
    .title{
      font-size: 25px;
    }
  </style>
  <body>
    <div class="title">
      Chessboard
    </div>
    <div class="content">
      <div class="chessboard">';
  for($i=0;$i<8;$i++){
    echo '<div class="row">';
    for($j=0;$j<8;$j++){
      if(($i+$j)%2==0){
        echo '<div class="black"></div>';
      }else{
        echo '<div class="white"></div>';
      }
    }
    echo '</div>';
  }
  echo '
    </div>
  </div>
</body>
</html>
';

?>
```

## Chessboard



### Question 3: Write a program to demonstrate a filter\_var function in PHP.

```
<?php
    if(!isset($_GET["email"]) || !isset($_GET["phone"]) || !isset($_GET[
"gender"]))
        || !isset($_GET["username"]))
    ){
        echo
        "Please enter valid details for Email, Phone Number, Gender, Username!<br>";
        return;
    }
    $username = $_GET["username"];
    $email = $_GET["email"];
    $gender = $_GET["gender"];
    $phone = $_GET["phone"];

    $error=array();
    if(!filter_var($email,FILTER_VALIDATE_EMAIL)){
        $error["Email"] = $email;
    }
    if(!filter_var($phone,FILTER_VALIDATE_INT)){
        $error["Phone"] = $phone;
    }
    if(!preg_match('/^[a-zA-Z0-9]{7,}$/', $username)) {
        $error["Username"] = $username;
    }
    if(!filter_var($gender,FILTER_VALIDATE_BOOLEAN)){
        $error["Gender"] = $gender;
    }
    if(sizeof($error)==0){
        echo "Details provided:<br>Username: $username<br>Email: $email<br>
        Gender: $gender<br>Phone: $phone<br><br>
        All details validated successfully!<br>
        ";
        return;
    }
    echo "Details provided:<br>Username: $username<br>Email: $email<br>
        Gender: $gender<br>Phone: $phone<br><br>
        Following details are invalid:-<br>
        ";
    foreach(array_keys($error) as $key) echo "$key ";
    echo "<br>";
?>
```

← → ↻ 🏠 ⓘ localhost:3000/3.php?email=k@gmail.com&username=k&phone=asjrjqwek&gender=1

📱 Apps 📘 facebook 📺 Rediff 📺 YouTube 📧 Gmail 🕒 ESS 📁 Games 📁 WebD 📁 Docu

Details provided:

Username: k

Email: k@gmail.com

Gender: 1

Phone: asjrjqwek

Following details are invalid:-

Phone Username

← → ↻ 🏠 ⓘ localhost:3000/3.php?email=k@gmail.com&username=KrunalRank&phone=7016507648&gender=1

📱 Apps 📘 facebook 📺 Rediff 📺 YouTube 📧 Gmail 🕒 ESS 📁 Games 📁 WebD 📁 Documentatio.

Details provided:

Username: KrunalRank

Email: k@gmail.com

Gender: 1

Phone: 7016507648

All details validated successfully!

#### Question 4: Write a program to implement a basic search engine.

```
<?php
require('./vendor/autoload.php');
$dotenv = Dotenv\Dotenv::createImmutable(__DIR__);
$dotenv->load();
$query="";
if(isset($_POST["query"])){
    $query = $_POST["query"];
}
$search_query = 'https://www.googleapis.com/customsearch/v1?key='.$_ENV[
"API_KEY"].'&cx='.$_ENV["CS"].'&q='.$query;
$response = file_get_contents($search_query);
$response = json_decode($response,true);
echo '
<html>
    <head>';

if($query!="")
    echo '<title>Search Results - '.$query.'</title>';
else
    echo 'KR\'s Search Engine';

echo '
<style>
    .result{
        padding: 5px;
    }
    .heading{
        font-size: 24px;
    }
    .link a{
        color: green;
        font-size: 12px;
    }
    .container{
        width: 60%;
    }
</style>
</head>';
echo '
    <body>
    <h1>KR\'s Search Engine</h1>
    <form action="search.php" method="post">
        <input type="text" value="'.$query.
'" placeholder="Enter your Search Query..." name="query">
        <input type="submit">
    </form>
    <br>
    <hr>
';
echo '<div class="container">';
foreach($response["items"] as $item){
    echo '
        <div class="result">
            <div class="heading"><a href="'.$item["formattedUrl"].'">'.$
item["title"].'</a></div>
            <div class="link"><a href="'.$item["formattedUrl"].'">'.$
item["formattedUrl"].'</a></div>
            <div class="description">'.$item["snippet"].'</div>
        </div>
    ';
}
echo '</div></body></html>';

?>
```

Activities Google Chrome Sep 3 6:15 PM

Assignment 4 React JS and PHP Restful Software Tools 3 - Google Search Results - digimon

localhost:3000/search.php

Apps Facebook Rediff YouTube Gmail ESS Games WebD Documentatio... Internships Coding Other bookmarks

## KR's Search Engine

digimon Submit

---

[Video :: Digimon World: Next Order P19 - Steam Community](https://steamcommunity.com/sharedfiles/filedetails/?id=871382982)  
<https://steamcommunity.com/sharedfiles/filedetails/?id=871382982>  
Feb 24, 2017 ... Steam Community: . More story DIGIMON WORLD NEXT ORDER [https://store.playstation.com/#!/pt-pt/tid=CUSA05392\\_00](https://store.playstation.com/#!/pt-pt/tid=CUSA05392_00).

[Digimon Masters Online General Discussions :: Steam Community](https://steamcommunity.com/app/537180/discussions/0/)  
<https://steamcommunity.com/app/537180/discussions/0/>  
PINNED: To those who have their tickets not answered (pending). xXMishkaXx. 0 . Apr 29, 2019 @ 4:03am. PINNED: [Notice] All Complaints and Ban Regarded ...

[Showing results for: Steam, Digimon ... - Steam Community Market](https://steamcommunity.com/market/search/appid=753&category...)  
<https://steamcommunity.com/market/search/appid=753&category...>  
Results 1 - 10 of 41 ... Showing results for: Steam Digimon Story Cyber Sleuth: Complete Edition Clear all.

[Steam Workshop::Digivolved Redigitized](https://steamcommunity.com/sharedfiles/filedetails/?id=1348812149)  
<https://steamcommunity.com/sharedfiles/filedetails/?id=1348812149>  
Mar 31, 2018 ... This is a mod which celebrates the wonderful creation of Digimon, This mod brings these epic digital creatures to ark to battle across the island ...

[Digimon Story Cyber Sleuth: Complete Edition General Discussions ...](https://steamcommunity.com/app/1042550/discussions/)  
<https://steamcommunity.com/app/1042550/discussions/>  
If you put Digimon World Next Order on Steam I will buy it at full price..... taichiyagami123456789. 4. Aug 28 @ 12:22pm. Perfect Hacker Achievement Won ...

[Digimon Masters Online Read First Before Posting :: Steam ...](https://steamcommunity.com/app/537180/discussions/)  
<https://steamcommunity.com/app/537180/discussions/>  
Digimon Masters Online - Digimon Masters Online is the latest MMO featuring the ever-popular Digimon franchise. This long awaited game will feature a deeper

**This search engine that I made is purely dynamic and returns result from a gaming website steamcommunity.com.**

**It works on an API call from Custom Search API.**

**Question 5: Create a student Registration form using HTML Form elements and display all student information on another page using PHP. Validate all the fields.**

**Form Page:**

```
<html>

<head>
  <title>Registration Form</title>
  <link rel="stylesheet" href=
"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity=
"sha384-JcKb8q3iqJ61gNW9KGB8thSsNjpsL0n8PARn9HuZ0nIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
</head>
<style>
  .container {
    margin-top: 20px;
  }
</style>

<body>
  <div class="container" style="text-align: center">
    <h3> Registration Form</h3>
  </div>
  <div class="container">
    <form action="5A.php" method="post">
      <div class="form-group">
        <label for="admissionNoLabel">Admission Number</label>
        <input type="text" class="form-control" name="admissionNo" id="admissionNo"
aria-describedby="name" placeholder="Enter Admission Number" required>
        <small id="admissionNoHelp" class="form-text text-muted">
Please enter your Admission Number(Eg. UXXXXXXX)</small>
      </div>
      <div class="form-group">
        <label for="fullNameLabel">Full Name</label>
        <input type="text" class="form-control" name="fullName" id="fullName"
aria-describedby="name" placeholder="Enter Full Name..." required>
        <small id="fullNameHelp" class="form-text text-muted">
Please enter your Full name (First Name Middle Name Last Name)</small>
      </div>
      <div class="form-group">
        <label for="DOJLabel">Date of Joining</label>
        <input type="date" class="form-control" name="DOJ" id="DOJ" aria-describedby="DOJ"
required>
        <small id="DOJHelp" class="form-text text-muted">
Please enter the Date when you joined SVNIT Surat</small>
      </div>
      <div class="form-group">
        <label for="branchLabel">Branch</label>
        <input type="text" class="form-control" name="branch" id="branch" aria-describedby=
"branch" placeholder="Enter Branch..." required>
        <small id="branchHelp" class="form-text text-muted">
Please enter your Pursued Engineering Field</small>
      </div>
      <div class="form-group">
        <label for="cgpaLabel">Current CGPA</label>
        <input type="number" step="any" name="cgpa" class="form-control" id="cgpa"
aria-describedby="cgpa" required >
        <small id="cgpaHelp" class="form-text text-muted">Please enter your Current CGPA</
small>
      </div>
      <button type="submit" class="btn btn-primary">Submit</button>
    </form>
  </div>
  <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity=
"sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+0GpamoFVy38MVBnE+IbbVYUew+0rCXaRkfj" crossorigin="anonymous"></
script>
  <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity=
"sha384-9/reFTGAW83EW2RDu2S0VKA1Zap3H66lZ81PoYlFhhbGU+6BZp6G7niu735Sk7lN" crossorigin="anonymous"></
script>
  <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity=
"sha384-B4gtljrGC7Jh4AgTPSdUt0Bvf08shuf57BaghqFfPLYxofvL8/KUEfYiJOMMV+rV" crossorigin="anonymous"></
script>
</body>

</html>
```



# Registration Form

Admission Number

U18C0081

Please enter your Admission Number(Eg. UXXXXXXX)

Full Name

Krunal Rajeshbhai Rank

Please enter your Full name (First Name Middle Name Last Name)

Date of Joining

22/07/2018



Please enter the Date when you joined SVNIT Surat

Branch

Computer Engineering

Please enter your Pursued Engineering Field

Current CGPA

9.78

Please enter your Current CGPA

Submit

## Information Page:

```
<?php

if(!isset($_POST["admissionNo"]) || !isset($_POST["fullName"]) || !isset($_POST["DOJ"])
|| !isset($_POST["branch"]) || !isset($_POST["cgpa"])){
    header("Location:5.php");
    return;
}
$admissionNo = $_POST["admissionNo"];
$fullName = $_POST["fullName"];
$DOJ = $_POST["DOJ"];
$branch = $_POST["branch"];
$cgpa = $_POST["cgpa"];

?>
<html>

<head>
    <title>Registration Form</title>
    <link rel="stylesheet" href=
"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity=
"sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
</head>
<style>
    .container {
        margin-top: 20px;
    }
</style>

<body>
    <div class="container" style="text-align: center">
        <h3> Registration Details</h3>
    </div>
    <div class="container">
        <div class="container">
            <h4> Admission Number </h4> <h5><?php echo $admissionNo?></h5>
            <h4> Full Name </h4> <h5><?php echo $fullName?></h5>
            <h4> Date of Joining </h4> <h5><?php echo $DOJ?></h5>
            <h4> Branch </h4> <h5><?php echo $branch?></h5>
            <h4> Current CGPA </h4> <h5><?php echo $cgpa?></h5>
        </div>
    </div>
    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity=
"sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+0GpamoFVy38MVBnE+IbbVYUew+0rCXaRkfj" crossorigin="anonymous"></script>
    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity=
"sha384-9/reFTGAW83EW2RDu2S0VKA1Zap3H66lZ8H8PoYlFhbGU+6BZp6G7niu735Sk7lN" crossorigin="anonymous"></script>
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity=
"sha384-B4gt1jrGC7Jh4AgTPSdUt0Bvf08shuf57BaghqFfPlYxofvL8/KUEfYiJOMMV+rV" crossorigin="anonymous"></script>
</body>

</html>
```

## Registration Details

**Admission Number**

U18C0081

**Full Name**

Krunal Rajeshbhai Rank

**Date of Joining**

2018-07-22

**Branch**

Computer Engineering

**Current CGPA**

9.78

**Question 6: Write a PHP script to make a web application take a name as input and on submit it shows a hello <name> page where <name> is taken from the request. And provide a logout button on clicking this button it should show a logout page with a thank you <name> message.**

**Login Page:**

```
<?php
    session_start();
    if (isset($_SESSION["username"])) {
        header("Location:6A.php");
        return;
    }

?>

<html>

<head>
    <title>Login</title>
    <link rel="stylesheet" href=
"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity=
"sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpsL0n8PARn9HuZ0nIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
</head>
<style>
    .container {
        margin-top: 20px;
        align-items: center;
    }

    form {
        align-items: center;
    }
</style>

<body>
    <div class="container" style="text-align: center">
        <h3>Hey there!</h3>
        <h6>Guest Login using Name.</h6>
    </div>
    <div class="container">
        <form action="6A.php" method="post">
            <div class="form-group">
                <label for="usernameLabel">Username</label>
                <input type="text" class="form-control" name="username" id="username"
aria-describedby="username" placeholder="Enter Username..." required>
                <small id="usernameHelp" class="form-text text-muted">Enter a friendly Username!</
small>
            </div>

            <button type="submit" class="btn btn-primary">Login</button>
        </form>
    </div>
    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity=
"sha384-Dfxdz2htPH0lsSSs5nCTpuj/zy4C+0GpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj" crossorigin="anonymous"></
script>
    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity=
"sha384-9/reFTGAW83EW2RDu2S0VKA1Zap3H66lZ81PoYlFhbGU+6BZp6G7niu735Sk7lN" crossorigin="anonymous"></
script>
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity=
"sha384-B4gt1jrGC7Jh4AgTPSdUt0Bvf08shuf57BaghqFfPLYxoFvL8/KUEfYiJOMMV+rV" crossorigin="anonymous"></
script>
</body>

</html>
```

# Hey there!

Guest Login using Name.

Username

Enter a friendly Username!

Login

## Home Page:

```
<?php
session_start();
if(!isset($_SESSION["username"])){
    $username = "";
    if(isset($_POST["username"])){
        $username = $_POST["username"];
    }else{
        header("Location:6.php");
        return;
    }
    if(!preg_match('/^[a-zA-Z0-9]{7,}$/', $username)) {
        header("Location:6.php");
        return;
    }
    session_start();
    $_SESSION["username"]=$username;
}

?>

<html>

<head>
    <title>Welcome</title>
    <link rel="stylesheet" href=
"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity=
"sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpsL0n8PARn9HuZ0nIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
</head>
<style>
    .container {
        margin-top: 20px;
        align-items: center;
    }
    form{
        align-items: center;
    }
</style>

<body>
    <div class="container" style="text-align: center">
        <h3>Welcome to the Club!</h3>
        <h2><?php echo $_SESSION["username"]?></h2>
    </div>
    <div class="container">
        <br><br><br>
        <form action="6B.php" method="post">
            <button type="submit" class="btn btn-primary" style="width: 100%">Logout</button>
        </form>
    </div>
    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity=
"sha384-DfxDz2htPH0lsSSs5nCTpuj/zy4C+0GpamoFVy38MVBnE+IbbVYUew+0rCXaRkfj" crossorigin="anonymous"></script>
    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity=
"sha384-9/reFTGAW83EW2RDu2S0VKA1Zap3H66lZ81PoYlFhbGU+6BZp6G7niu735Sk7lN" crossorigin="anonymous"></script>
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity=
"sha384-B4gtljrGC7Jh4AgTPSdUt0Bvf08shuf57BaghqFfPlYxofvL8/KUEfYiJOMMV+rV" crossorigin="anonymous"></script>
</body>

</html>
```

# Welcome to the Club!

## Krunal Rank

Logout

## Logout Page:

```
<html>

<head>
  <title>Welcome</title>
  <link rel="stylesheet" href=
"https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity=
"sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZ0nIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
</head>
<style>
  .container {
    margin-top: 20px;
    align-items: center;
  }
  form{
    align-items: center;
  }
</style>

<body>
  <div class="container" style="text-align: center">
    <h3>See you later!</h3>
    <h2>
      <?php
        session_start();
        echo $_SESSION["username"];
        unset($_SESSION["username"]);
        header("Refresh: 5,URL=http://localhost:3000/6.php");

      ?></h2>
    <h6>The page will be redirected to Login Page automatically in 5 secs.</h6>
  </div>
  <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity=
"sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+0GpamoFVy38MVBnE+IbbVYUew+0rCXaRkfj" crossorigin="anonymous"></
script>
  <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity=
"sha384-9/reFTGAW83EW2RDu2S0VKAizap3H66lZ81PoYlFhbGU+6BZp6G7niu735Sk7lN" crossorigin="anonymous"></
script>
  <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity=
"sha384-B4gt1jrGC7Jh4AgTPSdUt0Bvf08shuf57BaghqFfPLYxofvL8/KUEfYiJOMMV+rV" crossorigin="anonymous"></
script>
</body>

</html>
```





localhost:3000/6B.php

 Apps  facebook  Rediff  YouTube  Gmail  ESS  Games  V

**See you later!**

**Krunal Rank**

The page will be redirected to Login Page automatically in 5 secs.