

# Class Work 3

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Name: Aditya Pawar

USN: Aditya\_72233061J

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## Q1 Email validation

```
const emailRegex = /^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[A-Za-z]{2,}$/;
function isValidEmail(email) {
  return emailRegex.test(email);
}
console.log(isValidEmail("test@example.com"));
console.log(isValidEmail("bad@.com"));
```

## Q2 Strong password validation

```
const strongPwdRegex = /^(?=.*{8,20}$)(?=.*[a-z])(?=.*[A-Z])(?=.*\d)(?=.*[\w\s]).*$/;
function isStrongPassword(pwd) {
  return strongPwdRegex.test(pwd);
}
console.log(isStrongPassword("Abc@1234"));
console.log(isStrongPassword("weakpass"));
```

## Q3 Find all numbers in a string (returns array of numeric substrings)

```
findAllNumbers(str) {
  return str.match(/\d+/g) || [];
}
console.log(findAllNumbers("Order 12, ref 345 and 6 items"));
```

## Q4 Extract all hashtags from a tweet

```

on extractHashtags(tweet) {
  return tweet.match(/#\w+/g) || [];
}
console.log(extractHashtags("Loving #javascript and #100DaysOfCode!"));
const pincodeRegex = /^[1-9][0-9]{5}$/;

```

## Q5 Validate Indian pincode (6 digits, cannot start with 0)

```

function isValidPincode(pin) {
  return pincodeRegex.test(pin);
}
console.log(isValidPincode("400001"));
console.log(isValidPincode("012345"));

```

## Q6 Remove extra spaces from a string (collapse multiple spaces and trim ends)

```

function normalizeSpaces(s) {
  return s.replace(/\s+/g, ' ').trim();
}
console.log(normalizeSpaces(" hello world \n how are you "));

```

## Q7 Check whether a given string is palindrome

```

function isPalindromeWithRegex(s) {
  const cleaned = s.replace(/^[a-zA-Z0-9]/g, "").toLowerCase();
  return cleaned === cleaned.split("").reverse().join("");
}
console.log(isPalindromeWithRegex("A man, a plan, a canal: Panama"));

```