

Chapter 11: Comparison Operators

Q1:

```
let num = 12;
if(num > 10){ console.log("Greater than 10"); } else { console.log("Not greater than 10"); }
```

Q2:

```
let a = 5, b = 5;
if(a === b){ console.log("Equal"); } else { console.log("Not Equal"); }
```

Q3:

```
let age = 18;
if(age >= 18){ console.log("You are adult"); } else { console.log("Underage"); }
```

Chapter 12: If...Else and Else If

Q1:

```
let marks = 75;
if(marks >= 80){ console.log("Grade A"); } else if(marks >= 60){ console.log("Grade B"); } else
```

Q2:

```
let number = 7;
if(number % 2 === 0){ console.log("Even"); } else { console.log("Odd"); }
```

Q3:

```
let temp = 25;
if(temp > 30){ console.log("Hot"); } else if(temp >= 20){ console.log("Normal"); } else { consol
```

Chapter 13: Testing Sets of Conditions

Q1:

```
let user = "admin", pass = "1234";
if(user === "admin" && pass === "1234"){ console.log("Login success"); } else { console.log("Log
```

Q2:

```
let age2 = 20, nationality = "Pakistani";
if(age2 >= 18 && nationality === "Pakistani"){ console.log("Eligible to vote"); } else { console
```

Q3:

```
let num2 = 50;
if(num2 >= 1 && num2 <= 100){ console.log("Between 1 and 100"); } else { console.log("Out of ran
```

Chapter 14: Nested If Statements

Q1:

```
let username = "user", password = "pass";
if(username === "user"){
  if(password === "pass"){
    console.log("Access granted");
  } else {
```

```
    console.log("Wrong password");
  }
} else {
  console.log("Wrong username");
}
```

Q2:

```
let sub1 = 40, sub2 = 50, sub3 = 60;
let avg = (sub1+sub2+sub3)/3;
if(avg >= 50){ if(sub1>=33 && sub2>=33 && sub3>=33){ console.log("Pass"); } else { console.log("Fail"); }
```

Q3:

```
let n = 12;
if(n > 0){ if(n % 2 === 0){ console.log("Positive Even"); } else { console.log("Positive Odd"); }
```

Chapter 15: Arrays

Q1:

```
let fruits = ["Apple","Banana","Mango","Orange"];
console.log(fruits);
```

Q2:

```
let nums = [10,20,30,40,50];
console.log("First: " + nums[0] + ", Last: " + nums[nums.length-1]);
```

Q3:

```
let colors = ["Red","Blue","Green"];
colors.push("Yellow");
console.log(colors);
```

Chapter 16: Arrays Adding & Removing

Q1:

```
let arr = ["Red","Green"];
arr.push("Blue");
console.log(arr);
```

Q2:

```
arr.pop();
console.log(arr);
```

Q3:

```
arr.shift();
console.log(arr);
arr.unshift("Purple");
console.log(arr);
```

Chapter 17: Arrays Splice & Slice

Q1:

```
let col = ["Red", "Blue", "Green"];
col.splice(1, 0, "Yellow");
console.log(col);
```

Q2:

```
col.splice(2, 1);
console.log(col);
```

Q3:

```
let newArr = col.slice(0, 2);
console.log(newArr);
```

Chapter 18: for Loops

Q1:

```
for(let i=1;i<=10;i++){ console.log(i); }
```

Q2:

```
for(let i=1;i<=10;i++){ console.log("5 x " + i + " = " + (5*i)); }
```

Q3:

```
let arr2 = ["Cat", "Dog", "Cow"];
for(let i=0;i<arr2.length;i++){ console.log(arr2[i]); }
```

Chapter 19: for Loops with Flags

Q1:

```
let fruits2 = ["Apple", "Mango", "Banana"];
let found = false;
for(let i=0;i<fruits2.length;i++){ if(fruits2[i]==="Apple"){ found = true; break; } }
console.log(found?"Found":"Not Found");
```

Q2:

```
let nums2 = [1, 2, 3, 4, 5];
let search = 3;
let found2 = false;
for(let i=0;i<nums2.length;i++){ if(nums2[i]==search){ found2=true; break; } }
console.log(found2?"Found":"Not Found");
```

Q3:

```
let fruits3 = ["Orange", "Banana", "Kiwi"];
for(let i=0;i<fruits3.length;i++){ if(fruits3[i]==="Banana"){ console.log("Banana found, stopping"); break; } }
```

Chapter 20: Nested Loops

Q1:

```
for(let i=1;i<=4;i++){ let row=""; for(let j=1;j<=i;j++){ row+="*"; } console.log(row); }
```

Q2:

```
for(let i=2;i<=5;i++){ for(let j=1;j<=10;j++){ console.log(i+" x "+j+" = "+(i*j)); } }
```

Q3:

```
let matrix=[[1,2,3],[4,5,6],[7,8,9]];
```

```
for(let i=0;i<matrix.length;i++){ let row=""; for(let j=0;j<matrix[i].length;j++){ row+=matrix[i][j];
```