ASSIGNMENT -6

Conditional statements

1.Traffic Light System

Input:

If the light is red, log “Stop.”

If the light is yellow, log “Get ready to move.”

If the light is green, log “Go”

If the input doesn’t match any color, log “Invalid input.”

Code:

```
var light='green'
if(light=='red'){
    console.log('Stop')
}
else if(light=='yellow'){
    console.log('Get ready to move')
}
else if(light=='green'){
    console.log('Go')
}
else{
    console.log('Invalid input')
}
```

Output: Go

Explanation: The var light=’green’; sets the light variable to ‘green’.

The first if statement checks if light is ‘red’. It’s not, so it moves to the else if.

The second else if statement checks if light is ‘yellow’. It’s not, so it moves to the next else if.

The third else if statement checks if light is ‘green’. It is, so console.log(‘Go’); is executed. So the output is ‘Go”

2.Weather Description (Temperature Descriptions)

Write a program that describes the temperature:

Input:

If the temperature is exactly 0, log “it’s freezing cold.”

If the temperature is exactly 15, log “it’s a cool day.”

If the temperature is exactly 25, log “it’s a pleasant day.”

If the temperature doesn’t match any of these, log “Unknown weather.”

Code:

```
var temperature=25
if(temperature==0){
    console.log("it's freezing cold")
}
else if(temperature==15){
    console.log("'it's a cool day")
}
else if(temperature==25){
    console.log("'it's a pleasant day")
}
else {
    console.log("Unknown weather")
}
```

Output: “it’s a pleasant day”

Explanation: The var temperature=25; sets the temperature variable to 25.

The if statement checks if temperature is 0. It’s not, so it moves to the next condition.

The first else if checks if temperature is 15. It’s not, so it moves to the next condition.

The second else if checks if temperature is 25. It is, so console.log(“’it’s a pleasant day”); is executed. So the output is “It’s a pleasant day”.

3. Day of the Week

Create a program that takes input of a number representing the day of the week (1-7):

Input:

If the number is 1, log “Today is Monday.”

If the number is 2, log “Today is Tuesday.”

If the number is 3, log “Today is Wednesday.”

If the number is 4, log “Today is Thrusday.”

If the number is 5, log “Today is Friday.”

If the number is 6, log “Today is Saturday.”

If the number is 7, log “Today is Sunday.”

Code:

```
var day=1
if(day==1){
    console.log('Today is Monday')
}
else if(day==2){
    console.log('Today is Tuesday')
}
```

```
else if(day==3){
    console.log('Today is Wednesday')
}
else if(day==4){
    console.log('Today is Thrusday')
}
else if(day==5){
    console.log('Today is Friday')
}
else if(day==6){
    console.log('Today is Saturday')
}
else if(day==7){
    console.log('Today is Sunday')
}
else{
    console.log('Invalid day number')
}
```

Output:

Monday

Explanation: The var day=1; sets the day variable to 1.

The if statement checks if day is 1. It is, so console.log(‘Today is Monday’); is executed.

So the output is ‘Monday’.