**Exercises**

*Lecture 1:*

Javascript basic

1. Write a JavaScript program to find the area of a triangle where lengths of the three of its sides are 5, 6, 7

Var a = 5;

Var b =6;

Var c = 7;

Function s(a,b,c){

Var cv= (a+b+c)/2;

Var s = Math.sqrt(cv\*((cv-a)\*(cv-b)\*(cv-c)));

Console.log(s);

}

1. Write a JavaScript function that reverse a number.

*Example* x = 32243;

*Expected Output :* 34223

function rev(s){

var c="";

for(var i = s.length - 1;i>=0;i--){

c += s[i];

}

return c;

}

1. Write a JavaScript conditional statement to find the largest of five numbers. Display an alert box to show the result.

*Sample numbers :* -5, -2, -6, 0, -1

*Output :* 0

Var arr=[-5,-2,-6,0,-1];

Function s(var arr){

Var max = a[0];

For(var i =0;i<arr.length;i++){

If(a[i] >max)max=a[i];

}

Console.log(max);

}

1. Write a JavaScript program to sort the items of an array.

*Sample array :* var arr1 = [ 3, 8, 7, 6, 5, -4, 3, 2, 1 ];

*Sample Output :* -4,-3,1,2,3,5,6,7,8

Function f (arr){

For(var i=0;i<arr.length;i++){

If(a[i]>a[i+1]){

Var temp = a[i];

a[i] = a[i+1];

a[i+1]=teamp;

}

}

For(var i=0;i<arr.length;i++){

Console.log(a[i]+” “);

}

}

1. Write a JavaScript function to test if a number is a power of 2.

*Test Data :*

console.log(power\_of\_2(16));

console.log(power\_of\_2(18));

console.log(power\_of\_2(256));

*Output :*

true

false

true

function power\_of\_2(n){

Return n && (n & (n -1)) == 0;

}

1. Write a JavaScript program to list the properties of a JavaScript object.

*Sample object:*

var student = {

name : "David Rayy",

sclass : "VI",

rollno : 12

};

*Sample Output:* name, sclass, rollno

function \_keys(obj)

{

if (Object.keys) return Object.keys(obj);

var keys = [];

for (var key in obj) if (\_.has(obj, key)) keys.push(key);

return keys;

}

function isObject(obj)

{

var type = typeof obj;

return type === 'function' || type === 'object' && !!obj;

}

1. Write a JavaScript function to get a random integer from an array of integers.
2. Write a JavaScript function to split a string and convert it into an array of words.

*Test Data :*

console.log(string\_to\_array("Robin Singh"));

["Robin", "Singh"]

1. Write a JavaScript function to test whether a date is a weekend.

*Note :* Use standard Saturday/Sunday definition of a weekend.

*Test Data :*

console.log(is\_weekend('Nov 15, 2014'));

console.log(is\_weekend('Nov 16, 2014'));

console.log(is\_weekend('Nov 17, 2014'));

*Output :*

true

true

false

1. Write a JavaScript program to compute the sum of an array of integers.

*Example :* var array = [1, 2, 3, 4, 5, 6]

*Expected Output :* 21