Assignment 3

Question 1

```
void main()

{

 List<String> ballList = ["Ball ()","Ball ()","Ball ()","Ball ()","Ball ()"];

 print(ballList);

 print("remove repeted element ");

  ballList.removeRange(0,4);

  print(ballList);

}
```

Question 2

```
void main()

{

List<int> one = [1,2,3,4,5,6,7];
```

List<int> two = [3,5,6,7,9,10];

List<int> difference = one.toSet().difference(two.toSet()).toList();

print(difference.toString());

}

Question 3

void main() {

List<int> a = [1, 4, 9, 16, 25, 36, 49, 64, 81, 100];

int i = 0;

List<int> l = [];

for (var e in a) {

if (++i % 2 == 0) {

l.add(e);

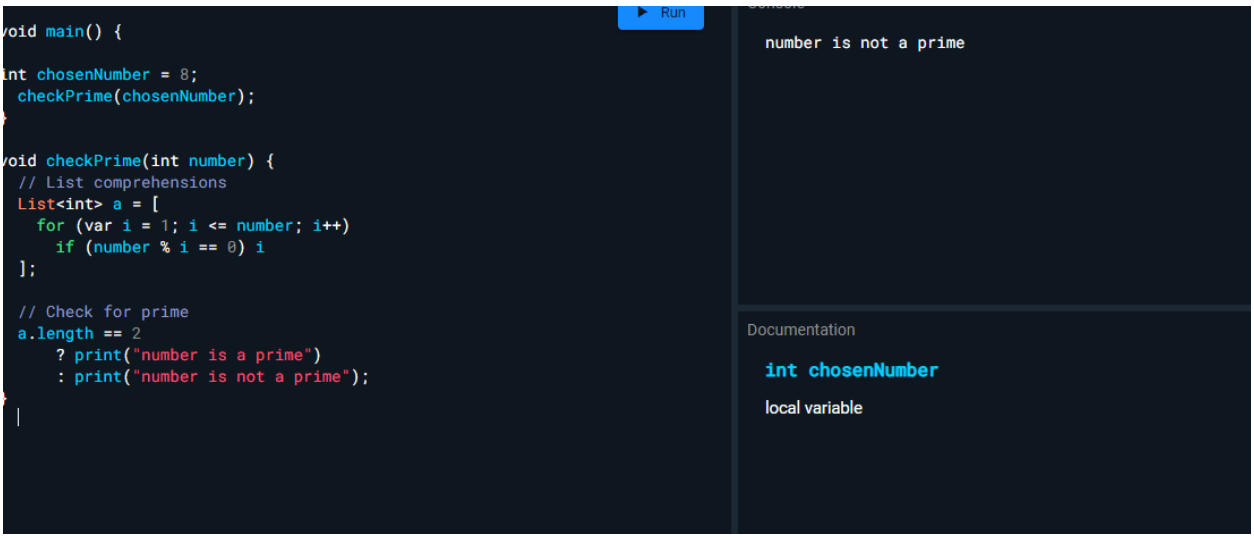
}

```
 }
 print(a);
 print(l);
}
```

Question 4

```
void main() {

int chosenNumber = 8;
 checkPrime(chosenNumber);
```

```
}


void checkPrime(int number) {
  // List comprehensions
  List<int> a = [
    for (var i = 1; i <= number; i++)
      if (number % i == 0) i
  ];


  // Check for prime
  a.length == 2
      ? print("number is a prime")
      : print("number is not a prime");
}
```




```
void main() {

int chosenNumber = 7;
  checkPrime(chosenNumber);
}

void checkPrime(int number) {
  // List comprehensions
  List<int> a = [
    for (var i = 1; i <= number; i++)
      if (number % i == 0) i
  ];

  // Check for prime
  a.length == 2
      ? print("number is a prime")
      : print("number is not a prime");
}
```

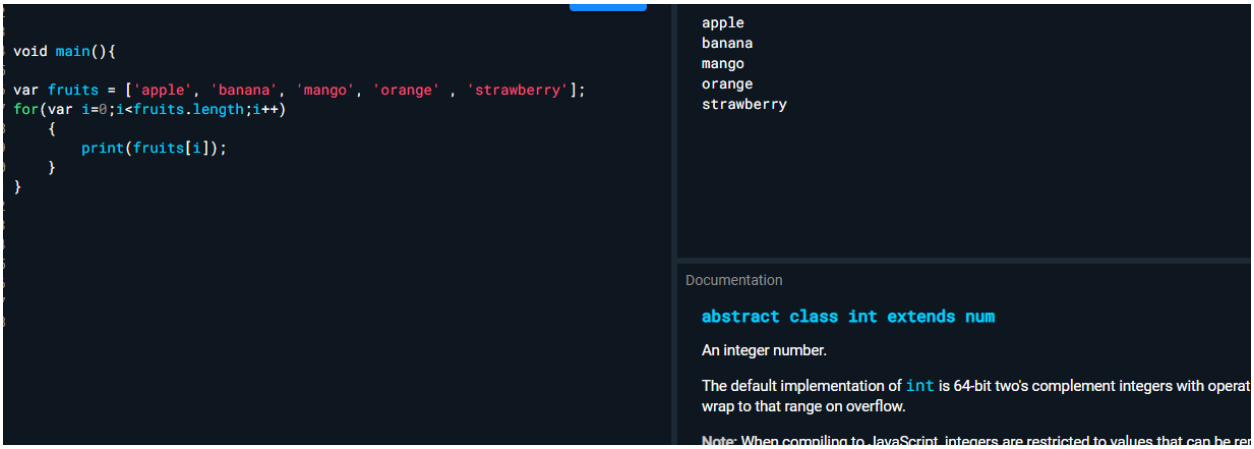
Question 5

```
void main(){


 print("multiplication table of 7 length 15");

for(var i=0 ; i< 105; )


{


  i= i+6;

  i++;

   print(" ${i}");


    }


}
```

Question 6

```
void main(){


var fruits = ['apple', 'banana', 'mango', 'orange' , 'strawberry'];

for(var i=0;i<fruits.length;i++)

   {

      print(fruits[i]);
```

```
    }
}
```

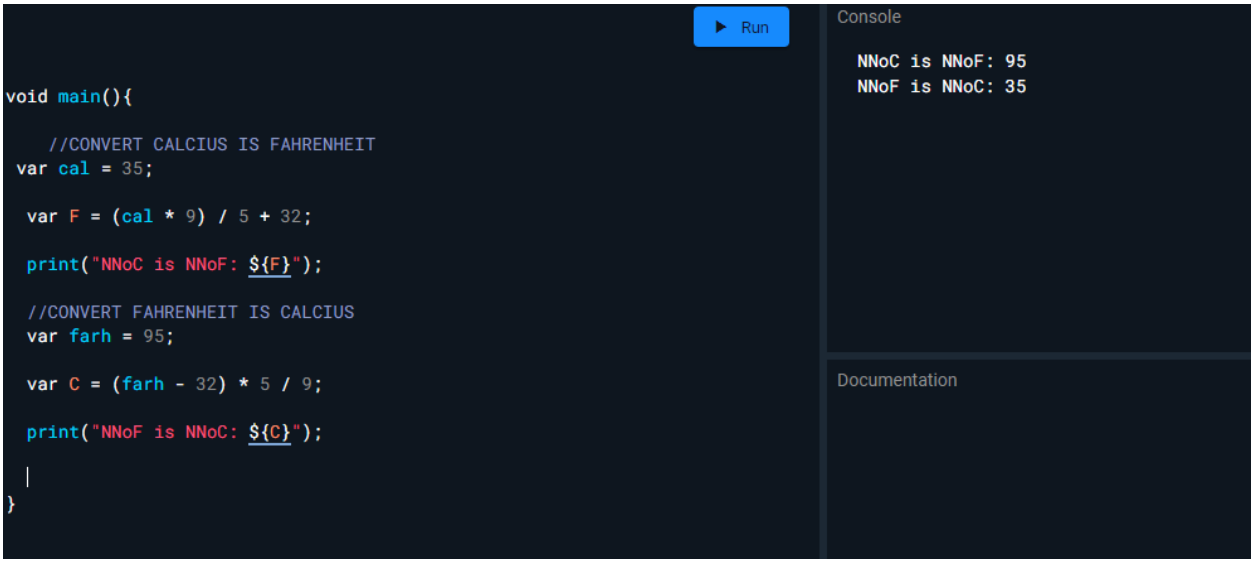


Question 7

```
void main()
{

var i =0;

while (i * 5 < 100)
{
   i = i + 1;
   print (i * 5);
}

}
```

Question 8

```
void main(){

   //CONVERT CALCIUS IS FAHRENHEIT
 var cal = 35;

  var F = (cal * 9) / 5 + 32;

  print("NNoC is NNoF: ${F}");

  //CONVERT FAHRENHEIT IS CALCIUS
  var farh = 95;

  var C = (farh - 32) * 5 / 9;

  print("NNoF is NNoC: ${C}");
}
```



Question 9

```
void main(){

 var user1= 10;
  var user2 = 5;



  //print("press 1 to add a number");
  //print("press 2 to subtract a number");
  //print("press 3 to multiply a number");
  //print("press 4 to divide a number");

  var action = 4;

 // var press_1 = user1+user2;
```

```
 //var press_2 = user1-user2;
// var press_3 = user1*user2;
// var press_4 = user1/user2;

 if(action== 1)
 {
   var result=user1+user2;
   print(result);
 }
 else if(action== 2)
 {
   var result=user1-user2;
   print(result);
 }
 else if(action== 3)
 {
   var result=user1*user2;
   print(result);
 }
 else if(action== 4)
 {
   var result=user1/user2;
   print(result);
 }
```

```
  else
  {
    print("wrong input");
  }
}
```


```
void main()
{

  //check and compare alphabets in this list
    var vowels = ['a', 'e', 'i', 'o', 'u'];

    var alphabet = 'i';

    for (var i = 0; i <= vowels.length; i++){

      if(alphabet == vowels[i])
```

```
    // if (vowels[i] == 'a' || vowels[i] == 'e' || vowels[i] == 'i' || vowels[i] == 'o' || vowels[i] == 'u' || vowels[i] == 'e' ) {
      {
       print("vowels");
      }
    else{
      print("is not a vowel");
    }
   }
}
```