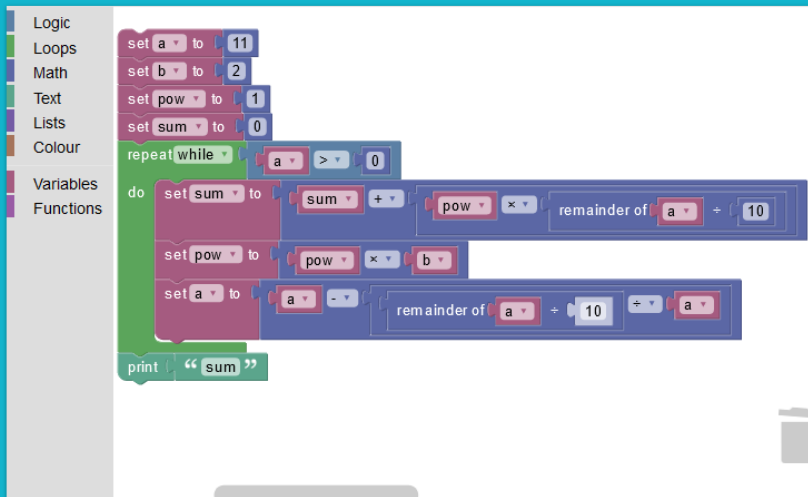


```

Y ← random (1,10)
Int father_hand ← Y + random(1,10) ;
Print (Y) ;
Int person_hand ← random(1,10) + random (1,10) ;
Int AdadBas ← 0 ;
    While ( father_hand < 21 &&    person_hand < 21    &&    Adadbas=0 )
    {
        Input x ;
        If (x = 0)
        {
            Adadbas ++
        }
        If (x=1)
        {
            Person_hand = Person_hand + random(1,10)
            Print( person_hand )
        }
    }
Print( father_hand )
Print( person_hand )
If ( father_hand = person_hand )
    { print (the game is draw) }
Else If ( father_hand = 21 || person_hand > 21 )
    { print (Father wins)}
Else If (person_hand = 21 || father_hand>21 )
    { print (Person wins) }
Else If ( father_hand > person_hand )
    { print (Person wins) }
Else If ( father_hand = person_hand )
    { print (the game is draw) }
Else
    { print (Person wins) }

```

۴- تغییر مبنا (تبدیل به مبنا ۱۰)

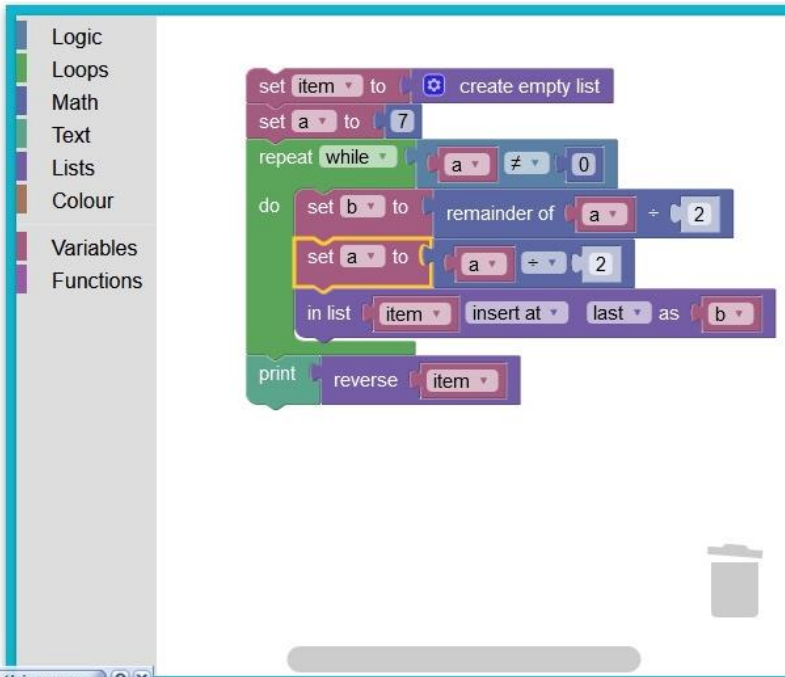


```

var a, b, pow, sum;

a = 11;
b = 2;
pow = 1;
sum = 0;
while (a > 0) {
  sum = sum + pow * (a % 10);
  pow = pow * b;
  a = a - (a % 10) / a;
}
window.alert('sum');
  
```

۴- تغییر مبنا (مبنا دلخواه)



```

var item, a, b, item;

item = [];
a = 7;
while (a != 0) {
  b = a % 2;
  a = a / 2;
  item.push(b);
}
window.alert(item.slice().reverse());
  
```

Logic

Loops

Math

Text

Lists

Colour

Variables

Functions

```

set M to 0
set S to 0
set H to 0
repeat 24 times
do
  repeat 60 times
  do
    repeat 60 times
    do
      print M
      print H
      print S
      set S to S + 1
    set S to 0
    set M to M + 1
  set M to 0
  set H to H + 1

```

JavaScript

English

```

var M, S, H;

M = 0;
S = 0;
H = 0;
for (var count3 = 0; count3 < 24; count3++) {
  for (var count2 = 0; count2 < 60; count2++) {
    for (var count = 0; count < 60; count++) {
      window.alert(M);
      window.alert(H);
      window.alert(S);
      S = S + 1;
    }
    S = 0;
    M = M + 1;
  }
  M = 0;
  H = H + 1;
}

```

۲- جا به جایی (swap)

Logic

Loops

Math

Text

Lists

Colour

Variables

Functions

```

set a to 20
set b to 10
if a > b
do
  set temp to a
  set a to b
  set b to temp
print a
print b

```

JavaScript

English

```

var a, b, temp;

a = 20;
b = 10;
if (a > b) {
  temp = a;
  a = b;
  b = temp;
}
window.alert(a);
window.alert(b);

```

Logic
Loops
Math
Text
Lists
Colour
Variables
Functions

```

set Count to 1
repeat while (Count <= 3)
do
  print "Hello World!"
  set Count to Count + 1

```

JavaScript English

```

var Count;

Count = 1;
while (Count <= 3) {
  window.alert('Hello World!');
  Count = Count + 1;
}

```

Logic
Loops
Math
Text
Lists
Colour
Variables
Functions

```

to findGCD with: a, b
repeat while (a <= b)
do
  if (a > b)
    set a to a - b
  else
    set b to b - a
return a

```

JavaScript English

```

var a, b;

// Describe this function...
function findGCD(a, b) {
  while (a != b) {
    if (a > b) {
      a = a - b;
    } else {
      b = b - a;
    }
  }
  return a;
}

a = 15;
b = 10;
window.alert(findGCD(a, b));

```

Logic
Loops
Math
Text
Lists
Colour
Variables
Functions

```

set a to 15
set b to 10
repeat while (a <= b)
do
  if (a > b)
    set a to a - b
  else
    set b to b - a
set result to a
print result

```

JavaScript English

```

var a, b, result;

a = 15;
b = 10;
while (a != b) {
  if (a > b) {
    a = a - b;
  } else {
    b = b - a;
  }
}
result = a;
window.alert(result);

```

Logic
Loops
Math
Text
Lists
Colour
Variables
Functions

```

set a to 15
set b to 10
set var to 0
repeat while (b > 0)
do
  set var to a
  set a to b
  if remainder of var + b == 0
  do
    print b
  set b to remainder of var + b

```

JavaScript English

```

var a, b, var2;

a = 15;
b = 10;
var2 = 0;
while (b > 0) {
  var2 = a;
  a = b;
  if (var2 % b == 0) {
    window.alert(b);
  }
  b = var2 % b;
}

```