Nama: Viochello Chandra Pelengkahu

Kelas : TIK1091C

MK   : Prak. Algoritma dan Pemrograman Komputer

Tugas 1 Mandiri Blocky dari Movie sampai Pond

MOVIE :

1
penColour('#ff0000'); circle(50, 70, 10); penColour('#3333ff'); rect(50, 40, 20, 40);
penColour('#000000'); line(60, 50, 80, 70, 5); line(40, 50, 20, 70, 5);

2
penColour('#ff0000'); circle(50, 70, 10); penColour('#3333ff'); rect(50, 40, 20, 40);
penColour('#000000'); line(60, 50, 80, time(), 5); line(40, 50, 20, 70, 5);

3
penColour('#ff0000'); circle(50, 70, 10); penColour('#3333ff'); rect(50, 40, 20, 40);
penColour('#000000'); line(60, 50, 80, time(), 5); line(40, 50, 20, 100 - time(), 5)

4
penColour('#ff0000'); circle(50, 70, 10); penColour('#3333ff'); rect(50, 40, 20, 40);
penColour('#000000'); line(60, 50, 80, time(), 5); line(40, 50, 20, 100 - time(), 5); line(60, 20, 100
- time(), 0, 5); line(40, 20, time(), 0, 5);

5
penColour('#ff0000');
circle(50, 70, 10);
penColour('#3333ff');
rect(50, 40, 20, 40);
line(40, 50, 20, 100 - time(), 5);
line(60, 50, 80, Math.pow((time() - 50) / 5, 2), 5);
line(40, 20, time(), 0, 5);
line(60, 20, 100 - time(), 0, 5);

6
penColour('#ff0000');
circle(50, 70, 10);
penColour('#3333ff');

```
rect(50, 40, 20, 40);
line(40, 50, 20, 100 - time(), 5);
line(60, 50, 80, Math.pow((time() - 50) / 5, 2), 5);
line(40, 20, time(), 0, 5);
line(60, 20, 100 - time(), 0, 5);

circle(20, 100 - time(), 5);

circle(80, Math.pow((time() - 50) / 5, 2), 5);
```

7
```
penColour('#ff0000');
circle(50, 70, 10);
penColour('#3333ff');
rect(50, 40, 20, 40);
line(40, 50, 20, 100 - time(), 5);
line(60, 50, 80, Math.pow((time() - 50) / 5, 2), 5);
line(40, 20, time(), 0, 5);
line(60, 20, 100 - time(), 0, 5);

penColour('#ff0000');
if (time() < 50) {
  circle(50, 70, 10);
} else {
  circle(50, 80, 20);
}

circle(20, 100 - time(), 5);

circle(80, Math.pow((time() - 50) / 5, 2), 5);
```

8
```
penColour('#ff0000');
if (time() < 50) {
  circle(50, 70, 10);
} else {
  circle(50, 80, 20);
}
circle(20, 100 - time(), 5);
circle(80, Math.pow((time() - 50) / 5, 2), 5);
```

```
penColour('#3333ff');
rect(50, 40, 20, 40);
line(40, 50, 20, 100 - time(), 5);
line(60, 50, 80, Math.pow((time() - 50) / 5, 2), 5);

if (time() < 50) {
  line(40, 20, time(), 0, 5);
  line(60, 20, 100 - time(), 0, 5);
} else {
  line(40, 20, 100 - time(), 0, 5);
  line(60, 20, time(), 0, 5);
}

9
penColour('#009900');
circle(50, time() / 2, time() / 2);
penColour('#3333ff');
rect(50, 40, 20, 40);
line(40, 50, 20, 100 - time(), 5);
line(60, 50, 80, Math.pow((time() - 50) / 5, 2), 5);
penColour('#ff0000');
if (time() < 50) {
  circle(50, 70, 10);
} else {
  circle(50, 80, 20);
}
circle(20, 100 - time(), 5);
circle(80, Math.pow((time() - 50) / 5, 2), 5);
if (time() < 50) {
  line(40, 20, time(), 0, 5);
  line(60, 20, 100 - time(), 0, 5);
} else {
  line(40, 20, 100 - time(), 0, 5);
  line(60, 20, time(), 0, 5);
        }
```

1
```
function start1() {
  play(0.25, 7);
  play(0.25, 8);
  play(0.25, 9);
  play(0.25, 7);
}
```

2
```
function start1() {
  first_part();
  first_part();
}
```

```
function first_part() {
  play(0.25, 7);
  play(0.25, 8);
  play(0.25, 9);
  play(0.25, 7);
}
```

3
```
function start1() {
  my_01();
  my_01();
  my_02();
  my_02();
}
```

```
function my_02() {
  play(0.25, 9);
  play(0.25, 10);
  play(0.5, 11);
}
```

```
function my_01() {
```

```
  play(0.25, 7);
  play(0.25, 8);
  play(0.25, 9);
  play(0.25, 7);
}
```

4
```
function my_02() {
  play(0.25, 9);
  play(0.25, 10);
  play(0.5, 11);
}

function my_01() {
  play(0.25, 7);
  play(0.25, 8);
  play(0.25, 9);
  play(0.25, 7);
}

function my_03() {
  play(0.125, 11);
  play(0.125, 12);
  play(0.125, 11);
  play(0.125, 10);
  play(0.25, 9);
  play(0.25, 7);
}

function start1() {
  my_01();
  my_01();
  my_02();
  my_02();
  my_03();
  my_03();
}
```

5
```
function my_04() {
```

```
  play(0.25, 7);
  play(0.25, 4);
  play(0.5, 7);
}

function my_02() {
  play(0.25, 9);
  play(0.25, 10);
  play(0.5, 11);
}

function my_01() {
  play(0.25, 7);
  play(0.25, 8);
  play(0.25, 9);
  play(0.25, 7);
}

function my_03() {
  play(0.125, 11);
  play(0.125, 12);
  play(0.125, 11);
  play(0.125, 10);
  play(0.25, 9);
  play(0.25, 7);
}

function start1() {
  my_01();
  my_01();
  my_02();
  my_02();
  my_03();
  my_03();
  my_04();
  my_04();
}
```

```
function my_02() {
```

```
  play(0.25, 9);
  play(0.25, 10);
  play(0.5, 11);
}

function my_04() {
  play(0.25, 7);
  play(0.25, 4);
  play(0.5, 7);
}

function my_01() {
  play(0.25, 7);
  play(0.25, 8);
  play(0.25, 9);
  play(0.25, 7);
}

function my_03() {
  play(0.125, 11);
  play(0.125, 12);
  play(0.125, 11);
  play(0.125, 10);
  play(0.25, 9);
  play(0.25, 7);
}

function start1() {
  setInstrument('violin');
  my_01();
  my_01();
  my_02();
  my_02();
  my_03();
  my_03();
  my_04();
  my_04();
}
```

```
function my_02() {
  play(0.25, 9);
  play(0.25, 10);
  play(0.5, 11);
}

function my_04() {
  play(0.25, 7);
  play(0.25, 4);
  play(0.5, 7);
}

function my_01() {
  play(0.25, 7);
  play(0.25, 8);
  play(0.25, 9);
  play(0.25, 7);
}

function my_03() {
  play(0.125, 11);
  play(0.125, 12);
  play(0.125, 11);
  play(0.125, 10);
  play(0.25, 9);
  play(0.25, 7);
}

function start1() {
  Composed();
}


function start2() {
  rest(1);
  rest(1);
  Composed();
}
```

```
function Composed() {
 setInstrument('violin');
 my_01();
 my_01();
 my_02();
 my_02();
 my_03();
 my_03();
 my_04();
 my_04();
}

8
function my_02() {
 play(0.25, 9);
 play(0.25, 10);
 play(0.5, 11);
}

function my_01() {
 play(0.25, 7);
 play(0.25, 8);
 play(0.25, 9);
 play(0.25, 7);
}

function my_03() {
 play(0.125, 11);
 play(0.125, 12);
 play(0.125, 11);
 play(0.125, 10);
 play(0.25, 9);
 play(0.25, 7);
}

function my_04() {
 play(0.25, 7);
 play(0.25, 4);
 play(0.5, 7);
}
```

```
function start1() {
  Composed();
  Composed();
}


function Composed() {
  setInstrument('violin');
  my_01();
  my_01();
  my_02();
  my_02();
  my_03();
  my_03();
  my_04();
  my_04();
}

function start2() {
  rest(1);
  rest(1);
  Composed();
  Composed();
}

9
function my_02() {
  play(0.25, 9);
  play(0.25, 10);
  play(0.5, 11);
}

function Rest() {
  rest(1);
  rest(1);
}

function my_01() {
  play(0.25, 7);
```

```
  play(0.25, 8);
  play(0.25, 9);
  play(0.25, 7);
}

function my_03() {
  play(0.125, 11);
  play(0.125, 12);
  play(0.125, 11);
  play(0.125, 10);
  play(0.25, 9);
  play(0.25, 7);
}

function my_04() {
  play(0.25, 7);
  play(0.25, 4);
  play(0.5, 7);
}

function start1() {
  setInstrument('piano');
  Composed();
  Composed();
}


function Composed() {
  my_01();
  my_01();
  my_02();
  my_02();
  my_03();
  my_03();
  my_04();
  my_04();
}

function start2() {
  setInstrument('violin');
```

```
  Rest();
  Composed();
  Composed();
}


function start3() {
  setInstrument('drum');
  Rest();
  Rest();
  Rest();
  Composed();
  Composed();
}


function start4() {
  setInstrument('guitar');
  Rest();
  Rest();
  Composed();
  Composed();
}
```

POND TUTOR :

Pond Tutor
1
cannon(90, 40);

2
cannon(180, 47);

3
```
while (true) {
  cannon(45, 60);
}
```

4

```
while (true) {
  cannon(270, 60);
}
```

5
```
while (true) {
  cannon(180, scan(180));
}
```

6
```
while (true) {
  cannon(0, scan(0));
}
```

7
```
swim(315);
```

8
```
swim(280);
```

9
```
while (true) {
  if (getX() < 50) {
    swim(0);
  } else {
    stop();
    cannon(0, 40);
  }
}
```

10
```
while (true) {
  cannon(45, scan(45));
  if (getX() < 50) {
    swim(45);
  } else if (getY() < 50) {
    swim(0);
  } else {
    stop();
  }
```

```
}
```

POND :
```
var dir;


dir = Math.random() + 120;
while (true) {
  if (scan(dir) <= 70) {
    swim(dir);
    cannon(dir, scan(dir));
  }
  dir = dir + 5;
}
```