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// FLOOR
const HEIGHT_FLOOR > is the height of floor tiles.
// MOVEMENT
const TANK_OFFSET > is how much the thank moves with each arrowUp/Down.
let distanceMoved > is how much the tank moved from origin, accumulative.
// TANK MEASUREMENTS
const TORUS_RADIUS > the radio of the torus used in the wheels.
const TANK_WHEEL_RADIUS > wheel radius;
const TANK_WHEELS_CROSS_LENGTH > wheel décor length.
const TANK_WHEELS_CROSS_WIDTH_HEIGHT > wheel décor height.
const TANK_LENGTH > tank length.
const TANK_HEIGHT > tank height.
const TANK_WIDTH > tank width.
// BUMPER (pointy front and back)
function bumper (upordown, frontorback, rx, ry, rz, color)
> upordown = 1 or -1 for top or bottom prisms.
> frontorback 1 or -1 for front or back prisms.
> rx, ry, rz are the rotations needed to get them in respective place.
> color is simple the color they are, bottom ones are darker.
const BUMPER_HEIGHT > bumper height, which is half of the tank cube height.
const BUMPER_LENGTH > the length of the bumper/prism.
const BUMPER_TRANSLATION_LENGTH > how much the thank needs to move in the x
axis.
const BUMPER_FLOATING_HEIGHT > how much the thank needs to move in the y
axis.
// WHEEL COVERS/SIDESKIRT
function sideSkirt (upordown, rightorleft, color)
> upordown = 1 or -1 for top or bottom flattened cubes.
> rightorleft 1 or -1 right or left flattened cubes.
> rx, ry, rz are the rotations needed to get them in respective place.
> color is simple the color they are, bottom ones are darker.
const SIDE_SKIRT_GAP > gap between wheels and covers/skirts.
const SIDE_SKIRT_FLOATING_HEIGHT > covers/skirts length, is dependent on the
tank´s main cube.
const SIDE_SKIRT_DISTANCE_FROM_TANK > distance from tank plus gap.
// STLANTED TOP EDGES
const SLANTED_EDGES_HEIGHT > body pyramid height.
const SLANTED_EDGES_FLOATING_HEIGHT > body pyramid height from floor.
const SLANTED_EDGES_WIDTH > width of body’s pyramid, depends on tank and side
skirt.
// WHEELS
const WHEELS_ROTATION_ANGLE > the angle of wheel rotation for each
arrowUp/Down.
constants WHEELS_RIGHT_OF_TANK, LEFT_OF_TANK > distance of wheels relative to
tank.
const WHEELS_ORDER > array with the positions of the wheels to place, in the
x axis.
let rotateWheels > how much the rotated, restarts at 360;
// CABIN/TOP CYLINDER
const CABIN_HEIGHT > top cylinder height;
const CABIN_LENGTH_RADIUS > top cylinder radius lengthwise;
const CABIN_WIDTH_RADIUS > top cylinder radius widthwise.
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// PLATFROM/CUBE UNDER CYLINDER)
const PLATFORM_LENGTH > the length of the platform.
const PLATFORM_HEIGHT > the height of the platform.
const PLATFORM_WIDTH > the width of the platform.
const PLATFORM_FLOATING_HEIGHT > y coordinates of the platform's top surface.
// LIGHT RIM UNDER SHOOTER CABIN
const SHOOTER_RIM_RADIUS > the radius of the rim.
const SHOOTER_RIM_HEIGHT > the height of the rim
const SHOOTER_RIM_FLOATING_HEIGHT > y coordinates of the top surface of that
cylinder.
const CABIN_FLOATING_HEIGHT = > y coordinates of the top surface of the cabin
(depends on the rim).
// HEART
const HEART_RADIUS > heart's cylinder/cube radius/sides.
const HEART_HEIGHT > heart height.
const HEART_FLOATING_HEIGHT > y coordinate of the top of the heart.
const HEART_DISTANCE_APART > distance between primitives.
// CANNON ROTATION
const CANNON_ROTATION_ANGLE_HORIZONTAL > angle per horizontal rotation(a/d).
const CANNON_ROTATION_ANGLE_VERTICAL > angle per vertical rotation(w/s).
// CANNON - BASE (1st CYLINDER)
const CANNON_BASE_LENGTH > base length.
const CANNON_BASE_RADIUS > base radius.
const CANNON_BASE_FLOATING_HEIGHT > center y coordinate.
// CANNON - PIPE (2nd CYLINDER)
const CANNON_PIPE_LENGTH > pipe length.
const CANNON_PIPE_RADIUS > pipe radius.
const CANNON_PIPE_DISTANCE_FROM_CABIN > mid pipe to cabin distance.
// CANNON - MUZZLE (3rd CYLINDER)
const CANNON_MUZZLE_LENGTH > muzzle length.
const CANNON_MUZZLE_RADIUS > muzzle radius.
const CANNON_MUZZLE_DISTANCE_FROM_CABIN > distance from mid muzzle to cabin.
// CANNON - HOLE (4th CYLINDER)
const CANNON_HOLE_LENGTH > hole length.
const CANNON_HOLE_RADIUS > hole radius.
const CANNON_HOLE_DISTANCE_FROM_CABIN > distance from mid hole to cabin.
// CANNON MOVEMENT
let rotateCannonHorizontal > current horizontal rotation of cannon.
let rotateCannonVertical > current vertical rotation of cannon.
const MAX_ANGLE > maximum vertical angle.
const MIN_ANGLE > minimum vertical angle.
// COLORS
constants DARK_PINK_COLOR, LIGHTER_PINK, EVEN_LIGHTER_PINK, ACTUAL_PINK,
IDONTKNOW_PINK > are simply colors attributed to certain parts of the tank.
// BULLET
const DELTATIME > delta time (set at 1/60).
const BULLET_SPEED > bullet's speed (set at 20).
let bullets = [];
let bulletKey > if bullet shooting is activated (starts as false).

(There are other colors/constants in app.js that we did not include here,
because their only purpose is creating a better effect of light/shadow, and
are dependent on already explained constants)
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