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// SKILLS ROUTINE
double skills[] = {
    270, // STARTS FACING 270°
    WRISTSEEK,-1000, // DEPLOY FLIPPER
    INTAKE_ON, // TURN INTAKE ON
    DRIVE,127,270,DISTANCE,1,2, // DRIVE TO FLIP CAP
    DRIVE,80,270,DISTANCE,0.7,2, // DRIVE TO FLIP CAP
    FLIP, // FLIP SO FORKS DON'T DRIFT
    WRISTSEEK,WRIST_FORWARD_POS, // PUT FLIPPER DOWN

    DRIVE,-127,270,DISTANCE,0.5,2, // DRIVE AWAY A LITTLE
    TURN,15,2, // TURN TO FACE CAP
    DRIVE,-60,15,DISTANCE,0.6,2, // DRIVE TO CAP
    WRISTSEEK,WRIST_VERTICAL_POS, // FLIP CAP
    PAUSE,0.125, // SHORT PAUSE

    DRIVE,127,15,DISTANCE,0.3,1, // DRIVE AWAY FROM CAP
    PAUSE,0.25, // SHORT PAUSE
    WRISTSEEK,WRIST_FORWARD_POS, // LOWER FLIPPER
    TURN,50,2, // TURN FOR NEXT CAP
    DRIVE,-90,50,DISTANCE,0.9,2, // DRIVE TO CAP
    WRISTSEEK,WRIST_VERTICAL_POS, // FLIP CAP
    PAUSE,0.5, // SHORT PAUSE

    DRIVE,127,50,DISTANCE,0.5,2, // DRIVE AWAY FROM CAP
    TURN,90,2, // AIM AT START TILE
    DRIVE,127,90,SONAR,0.5,2, // DRIVE BACK TO TILE

    TURN,0,2, // TURN TO FACE FLAGS
    START_COAST, // START FLYWHEEL SPINUP
    DRIVE,90,0,WHITE_L,0.5, // DRIVE SO DEF. ON TILE
    DRIVE,127,0,0.5, // DRIVE A LITTLE
    DRIVE,127,0,BLACK_L,2, // DRIVE OFF TILE
    DRIVE,127,0,0.2, // DRIVE A LITTLE
    DRIVE,90,0,WHITE_L,2, // DRIVE TO NEXT TILE

    TURN_AIM,BLUE_FLAG,CENTER,2, // AIM AT LEFT-MOST BLUE FLAG
    DRIVE,90,CDIR,DISTANCE,0.8,2, // DRIVE TO TOP FLAG DIST
    FIRE_AIM, TOP, // SHOOT TOP FLAG
    PAUSE, FIRED, 2, // WAIT TILL SHOT
    PAUSE, 0.5, // SHORT PAUSE
    STOP_FIRE, // STOP FLYWHEEL

    DRIVE,127,CDIR,DISTANCE,0.8,2, // DRIVE TO MIDDLE FLAG DIST
    FIRE_AIM,MIDDLE, // SHOOT MIDDLE FLAG
    PAUSE, FIRED, 2, // WAIT TILL SHOT
    PAUSE, 0.5, // SHORT PAUSE
    STOP_FIRE, // STOP FLYWHEEL
    STOP_COAST, // TURN FLYWHEEL FULLY OFF

    DRIVE,127,0,0.3, // DRIVE TO TOGGLE BOTTOM FLAG
    TURN,0,0.5, // TURN STRAIGHT
    INTAKE_ON, // TURN INTAKE ON
    DRIVE,-127,0,0.3, // DRIVE AWAY A LITTLE
    TURN,0,1, // TURN STRAIGHT

    DRIVE,-127,0,WHITE_L,2, // DRIVE TO START TILE
    DRIVE,-127,0,DISTANCE,0.5,1, // DRIVE TO LINE UP
    TURN,270,2, // TURN FOR NEXT MOVE
    TURN,265,2, // TURN FOR NEXT MOVE
    DRIVE,127,270,BLACK_B,1, // DRIVE OFF TILE
    DRIVE,127,270,DISTANCE,1.3,2, // DRIVE TO GET BALL
    INTAKE_ON, // MAKE SURE INTAKE IS ON
    PAUSE,0.5, // PAUSE TO LET BALL IN

    WRISTSEEK,WRIST_FORWARD_POS, // GET WRIST READY FOR FLIP
    DRIVE,-127,270,DISTANCE,0.45,2, // DRIVE AWAY FROM CAP
    TURN,215,2, // TURN FOR CAP FLIP
    DRIVE,-100,215,DISTANCE,0.7,2, // DRIVE TO CAP
    WRISTSEEK,WRIST_VERTICAL_POS, // FLIP CAP
    PAUSE,0.125, // SHORT PAUSE
    DRIVE,100,215,DISTANCE,0.1,2, // DRIVE AWAY FROM CAP

    TURN,270,2, // TURN FOR NEXT MOVE
    START_COAST, // START FLYWHEEL SPINUP
    DRIVE,127,270,DISTANCE,0.75,2, // DRIVE TO LINE UP
    PAUSE,0.25, // SHORT PAUSE
    TURN,0,1, // TURN TO AIM
    TURN_AIM,BLUE_FLAG,CENTER,2, // AIM AT CENTRE-MOST BLUE FLAG
    FLAG

    DRIVE,-90,CDIR,SONAR,1.2,1, // SHOOT TOP FLAG
    FIRE_AIM, TOP, // WAIT TILL SHOT
    PAUSE, FIRED, 2, // SHORT PAUSE
    PAUSE, 0.5, // SHORT PAUSE
    STOP_FIRE, // STOP FLYWHEEL

    TURN_AIM,BLUE_FLAG,CENTER,1, // AIM AT CENTRE-MOST BLUE FLAG
    FLAG
    DRIVE,127,CDIR,SONAR,0.8,2, // DRIVE TO MIDDLE FLAG DIST

    IF, GOTBALL, // IF WE HAVE ANOTHER BALL
        FIRE_AIM,MIDDLE, // SHOOT MIDDLE FLAG
        PAUSE, 0.5, // SHORT PAUSE
        PAUSE, FIRED, 2, // WAIT TILL SHOT
    ENDIF, // END OF IF

    STOP_FIRE, // STOP FLYWHEEL
    STOP_COAST, // TURN FLYWHEEL FULLY OFF
    INTAKE_OFF, // TURN INTAKE OFF
    DRIVE,127,0,0.5, // DRIVE TO TOGGLE BOTTOM FLAG

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TURN,0,1,	// TURN STRAIGHT	TURN,0,1,	// TURN STRAIGHT
INTAKE_ON,	// TURN INTAKE ON	INTAKE_ON,	// TURN INTAKE ON
DRIVE,-127,0,0.25,	// DRIVE AWAY A LITTLE	DRIVE,-127,0,0.5,	// DRIVE AWAY A LITTLE
TURN,0,1,	// TURN STRAIGHT	DRIVE,-127,0,DISTANCE,1.5,2,	// DRIVE BACK
		TURN,270,2,	// TURN TO FACE BLUE TILE
DRIVE,-127,0,SONAR,1.2,2,	// DRIVE AWAY FROM FLAG	DRIVE,127,270,WHITE_E,2,	// DRIVE TO BLUE TILE
WRISTSEEK,WRIST_FORWARD_POS,	// LOWER FORKS	DRIVE,-90,270,0.1,	// DRIVE TO BREAK
TURN,83,2,	// TURN TO FACE CAP	TURN,180,2,	// TURN
DRIVE,-127,90,DISTANCE,2.5,2,	// DRIVE TO CAP	DRIVE,127,180,BLACK_L,2,	// DRIVE OFF TILE
DRIVE,127,90,DISTANCE,0.1,1,	// DRIVE AWAY A LITTLE	DRIVE,-90,180,0.1,	// DRIVE TO BREAK
WRISTSEEK,WRIST_VERTICAL_POS,	// FLIP CAP	TURN,80,2,	// TURN TO FACE PLATFORM
PAUSE,0.5,	// PAUSE A LITTLE	DRIVE,127,90,DISTANCE,0.5,1,	// DRIVE TO PLATFORM
		DRIVE,127,90,DISTANCE,3,4,	// PARK
		END	// END OF ROUTINE
WRISTSEEK,WRIST_FORWARD_POS,	// LOWER FORKS	};	
DRIVE,127,90,DISTANCE,0.5,1,	// DRIVE AWAY FROM CAP		
TURN,180,2,	// TURN READY FOR NEXT MOVE		
WRISTSEEK,WRIST_VERTICAL_POS,	// RAISE FORKS		
DRIVE,127,180,DISTANCE,0.9,2,	// DRIVE TO LINE UP FOR CAP		
TURN,90,2,	// AIM FOR CAP		
DRIVE,127,90,DISTANCE,1,2,	// DRIVE TO FLIP CAP		
INTAKE_ON,	// INTAKE ON TO GET BALL		
START_COAST,	// TURN FLYWHEEL ON		
PAUSE,0.5,	// SHORT PAUSE		
DRIVE,-127,90,DISTANCE,1.25,2,	// DRIVE TO LINE UP FOR SHOT		
TURN,350,2,	// TURN TO FACE FLAGS		
TURN_AIM,BLUE_FLAG,LEFT,2,	// AIM AT RIGHT-MOST BLUE FLAG		
IF, GOTBALLS,	// IF WE HAVE TWO BALLS		
DRIVE,-90,CDIR,SONAR,1.5,1,	// LINE UP FOR SHOT		
DRIVE,90,CDIR,SONAR,1.5,1,	// LINE UP FOR SHOT		
FIRE_AIM,TOP,	// SHOOT TOP FLAG		
PAUSE,FIRED,2,	// WAIT TILL SHOT		
PAUSE,0.5,	// SHORT PAUSE		
STOP_FIRE,	// STOP FLYWHEEL		
ENDIF,	// END OF IF		
TURN_AIM,BLUE_FLAG,CENTER,1,	// AIM AT CENTRE-MOST BLUE		
FLAG			
DRIVE,127,CDIR,0.25,	// DRIVE CLOSE		
DRIVE,127,CDIR,SONAR,1,2,	// DRIVE TO MIDDLE FLAG DIST		
FIRE_AIM,MIDDLE,	// SHOOT MIDDLE FLAG		
PAUSE,FIRED,2,	// WAIT TILL SHOT		
PAUSE,0.5,	// SHORT PAUSE		
STOP_FIRE,	// STOP FLYWHEEL		
WRISTSEEK,WRIST_VERTICAL_POS,	// RAISE FORKS		
STOP_COAST,	// TURN FLYWHEEL FULLY OFF		
INTAKE_OFF,	// TURN INTAKE OFF		
DRIVE,127,0,0.5,	// DRIVE TO TOGGLE BOTTOM FLAG		