

# Coding Cup - Answer Key

## Contents

### Basic Training

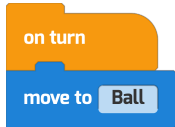
- [Basic Training Module 4 Solution - Get Moving!](#)
- [Basic Training Module 5 Solution - Shoot It!](#)
- [Basic Training Module 7 Solution - Make a Decision](#)
- [Basic Training Module 8 Solution - Pass It!](#)
- [Basic Training Module 9 Solution - Get a Clear Shot](#)
- [Basic Training Module 10 Solution - Put It All Together](#)
- [Basic Training Module 12 Solution - Up and Down](#)
- [Basic Training Module 13 Solution - Pass Upfield](#)

### Strategy Training

- [Strategy Training Module 2 Solution - Find Your Shot](#)
- [Strategy Training Module 3 Solution - Get Open](#)
- [Strategy Training Module 5 Solution - Hustle](#)
- [Strategy Training Module 7 Solution - Steal It!](#)
- [Strategy Training Module 8 Solution - Tackle Time](#)
- [Strategy Training Module 10 Solution - Pass to Striker](#)
- [Strategy Training Module 12 Solution - Defend the Goal](#)
- [Strategy Training Module 13 Solution - Stay and Defend](#)

## Answer Keys

### Basic Training Module 4 Solution - Get Moving!



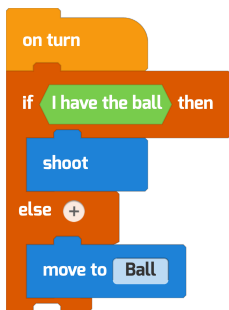
```
on turn
  move to Ball
```

### Basic Training Module 5 Solution - Shoot It!



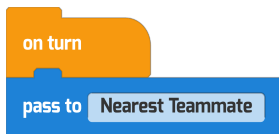
```
on turn
  shoot
```

### Basic Training Module 7 Solution - Make a Decision



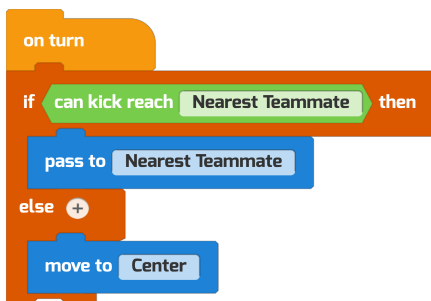
```
on turn
  if I have the ball then
    shoot
  else +
    move to Ball
```

### Basic Training Module 8 Solution - Pass It!



```
on turn
  pass to Nearest Teammate
```

### Basic Training Module 9 Solution - Get a Clear Shot



```
on turn
  if can kick reach Nearest Teammate then
    pass to Nearest Teammate
  else +
    move to Center
```

## Basic Training Module 10 Solution - Put It All Together

```
on turn
  if I have the ball then
    if can kick reach Nearest Teammate then
      pass to Nearest Teammate
    else +
      move to Center
  else +
    move to Ball
```

## Basic Training Module 12 Solution - Up and Down

```
on turn
  if Ball is above Self then
    move to direction Up
  else if Ball is below Self then -
    move to direction Down
  else +
    // Don't worry about adding code here for now
```

## Basic Training Module 13 Solution - Pass Upfield

```
on turn
  if I have the ball then
    pass to Nearest Teammate
  else if Ball is above Self then -
    move to direction Up
  else if Ball is below Self then -
    move to direction Down
  else +
    // Don't worry about adding code here for now
```

## Strategy Training Module 2 Solution - Find Your Shot

```
on turn
  if I have the ball then
    if can kick reach Opponent Goal then
      kick towards Opponent Goal
    else +
      move to direction Up
  else +
    move to Ball
```

# Strategy Training Module 3 Solution - Get Open

```
on turn
  if I have the ball then
    if can kick reach Opponent Goal then
      kick towards Opponent Goal
    else +
      move to direction Up
  else if Any Teammate has Ball then -
    move to Open Position
  else +
    move to Ball
```

# Strategy Training Module 5 Solution - Hustle

```
on turn
  if I have the ball then
    if can kick reach Opponent Goal then
      kick towards Opponent Goal
    else +
      move to direction Up
  else if Any Teammate has Ball then -
    move to Open Position
  else if can sprint then -
    sprint to Ball
  else +
    move to Ball
```

## Strategy Training Module 7 Solution - Steal It!

```
on turn
  if can tackle then
    tackle
  else +
    move to Ball
```

## Strategy Training Module 8 Solution - Tackle Time

```
on turn
  if I have the ball then
    if can kick reach Nearest Teammate then
      pass to Nearest Teammate
    else +
      move to Center
  else +
    if can tackle then
      tackle
    else +
      move to Ball
```

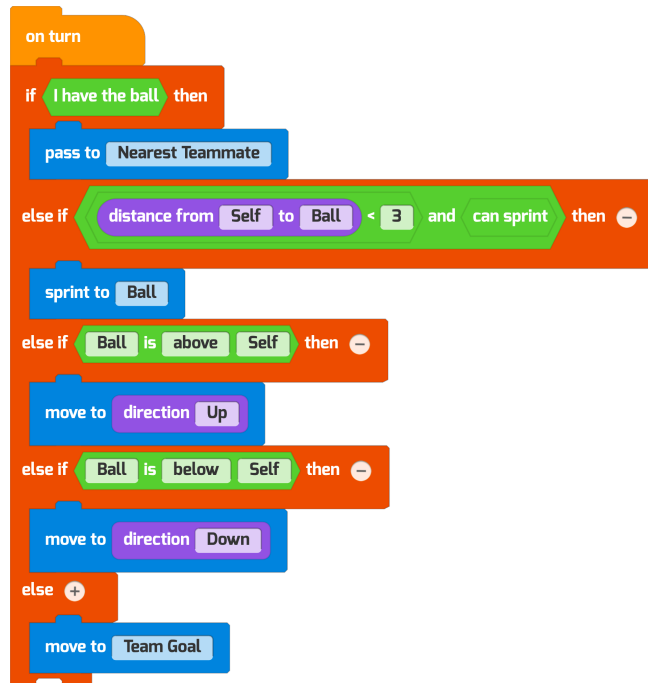
## Strategy Training Module 10 Solution - Pass to Striker

```
on turn
  if I have the ball then
    if can kick reach teammate 3 then
      pass to teammate 3
    else +
      move to Center
    else +
      if can tackle then
        tackle
      else +
        move to Ball
```

## Strategy Training Module 12 Solution - Defend the Goal

```
on turn
  if I have the ball then
    pass to Nearest Teammate
  else if distance from Self to Ball < 3 and can sprint then -
    sprint to Ball
  else if Ball is above Self then -
    move to direction Up
  else if Ball is below Self then -
    move to direction Down
  else +
    // Don't worry about adding code here for now
```

## Strategy Training Module 13 Solution - Stay and Defend



```
on turn
  if I have the ball then
    pass to Nearest Teammate
  else if distance from Self to Ball < 3 and can sprint then
    sprint to Ball
  else if Ball is above Self then
    move to direction Up
  else if Ball is below Self then
    move to direction Down
  else
    move to Team Goal
```

The code is a Scratch script for a soccer player's strategy. It starts with an 'on turn' block. The first conditional block is 'if I have the ball then', which contains a 'pass to Nearest Teammate' block. The second conditional block is 'else if distance from Self to Ball < 3 and can sprint then', which contains a 'sprint to Ball' block. The third conditional block is 'else if Ball is above Self then', which contains a 'move to direction Up' block. The fourth conditional block is 'else if Ball is below Self then', which contains a 'move to direction Down' block. The final 'else' block contains a 'move to Team Goal' block.