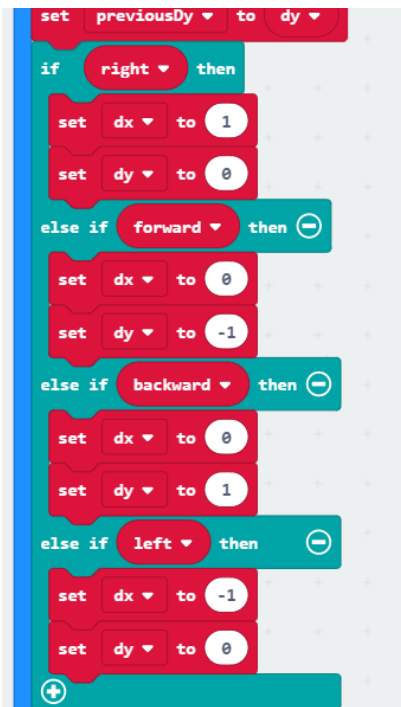# Merchant Venturers School of Engineering
# Outreach Programme

# Micro:bit Snake Game –Answers
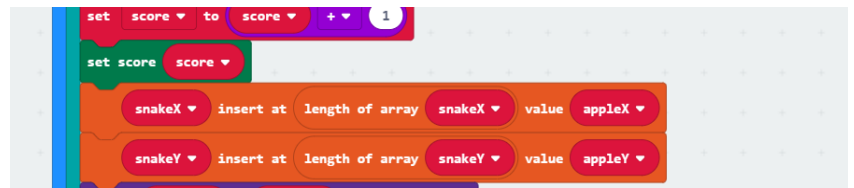
# By: Papakonstantopoulou Anna

*Answers to the tasks:*
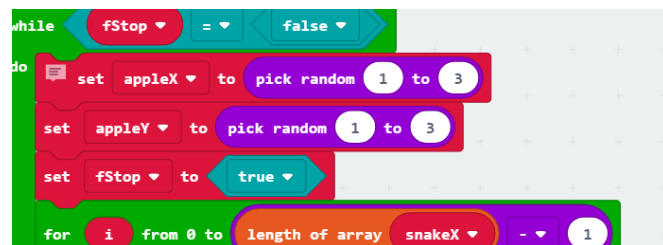
## c) Task 1:

```
set previousDy ▼ to dy ▼

if      right ▼   then
    set  dx ▼  to  1
    set  dy ▼  to  0
else if  forward ▼  then ⊖
    set  dx ▼  to  0
    set  dy ▼  to  -1
else if  backward ▼  then ⊖
    set  dx ▼  to  0
    set  dy ▼  to  1
else if  left ▼   then ⊖
    set  dx ▼  to  -1
    set  dy ▼  to  0
⊕
```

## b) Task 2:

```
set  score ▼  to  score ▼  + ▼  1

set score  score ▼
    snakeX ▼  insert at  length of array  snakeX ▼  value  appleX ▼
    snakeY ▼  insert at  length of array  snakeY ▼  value  appleY ▼
```

## a) Task 3:

```
while   fStop ▼  = ▼   false ▼
do
    set  appleX ▼  to  pick random  1  to  3
    set  appleY ▼  to  pick random  1  to  3
    set  fStop ▼  to   true ▼

    for  i  from 0 to  length of array  snakeX ▼  - ▼  1
```

## d) Task 4:

```
else                                                                    ⊖
    if  positionX ▼  < ▼  0  or ▼  positionX ▼  > ▼  4  or ▼  positionY ▼  < ▼  0  or ▼  positionY ▼  > ▼  4  then
        game over
    ⊕
```