## **Rubric**

**RUBRIC**

| **Category** | **Marks** |
| --- | --- |
| **Proper method/function definition with proper parameters** | **2** |
| **Properly initializing the row and column values** | **4** |
| **Properly running the loop** | **3** |
| **Proper fetching of the apartment names** | **3** |
| **Taking into account the middle row and column’s apartment names in case the squared 2D array is of an odd length** | **2** |
| **Printing the answer correctly** | **1** |
| **Note: There can be multiple solutions which produce the correct answer. Use your best judgement to evaluate the scripts.** | |

## **Set A**

| **Python** | **Java** |
| --- | --- |
| #Set A  def decodeMessageSetA(cw):  row = cw.shape[0]  column = cw.shape[1]  r1 = 0  r2 = row - 1  c1 = 0  c2 = column - 1  output = "";  while ((r1 < r2) and (c1 < c2)):  if (cw[r1][c1] != cw[r2][c2]):  output += cw[r1][c1] + cw[r2][c2]  r1+=1  c1+=1  r2-=1  c2-=1  if (row%2 == 1):  output += cw[row/2][column/2]  print("Possible Apartments:", end = " ")  for idx in range(0, len(output)):  print(output[idx], end = " ")  print() | public static void **decodeMessageSetA**(**String**[][] cw){  int row = cw.length;  int column = cw[0].length;  int r1 = 0, r2 = row - 1;  int c1 = 0, c2 = column - 1;  **String** output = "";  while ((r1 < r2) && (c1 < c2)){  if (cw[r1][c1] != cw[r2][c2]){  output += cw[r1][c1] + cw[r2][c2];  }  r1++;  c1++;  r2--;  c2--;  }  if (row%2 == 1){  output += cw[row/2][column/2];  }  **System**.out.**print**("Possible Apartments:");  for (int idx = 0; idx < output.**length**();idx++){  **System**.out.**print**(output.**charAt**(idx)+" ");  }  **System**.out.**println**();  } |

## **Set B**

| **Python** | **Java** |
| --- | --- |
| #Set B  def decodeMessageSetB(cw):  row = cw.shape[0]  column = cw.shape[1]  r1 = 0  r2 = row - 1  c1 = 0  c2 = column - 1  output = "";  while ((r1 < r2) and (c1 < c2)):  if (cw[r1][c2] != cw[r2][c1]):  output += cw[r1][c2] + cw[r2][c1]  r1+=1  c1+=1  r2-=1  c2-=1  if (row%2 == 1):  output += cw[row/2][column/2]  print("Possible Apartments:", end = " ")  for idx in range(0, len(output)):  print(output[idx], end = " ")  print() | public static void **decodeMessageSetB**(**String**[][] cw){  int row = cw.length;  int column = cw[0].length;  int r1 = 0, r2 = row - 1;  int c1 = 0, c2 = column - 1;  **String** output = "";  while ((r1 < r2) && (c1 < c2)){  if (cw[r1][c2] != cw[r2][c1]){  output += cw[r1][c2] + cw[r2][c1];  }  r1++;  c1++;  r2--;  c2--;  }  if (row%2 == 1){  output += cw[row/2][column/2];  }  **System**.out.**print**("Possible Apartments:");  for (int idx = 0; idx < output.**length**();idx++){  **System**.out.**print**(output.**charAt**(idx)+" ");  }  **System**.out.**println**();  } |