Programlama Dilleri - Ödev 4
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4. Consider the following C program segment. Rewrite it using no gotos or **breaks**.

```
j = -3;
for (i = 0; i < 3; i++) {
  switch (j + 2) {
    case 3:
    case 2: j--; break;
    case 0: j += 2; break;
    default: j = 0;
  }
  if (j > 0) break;
  j = 3 - i
}
```

Cozum :

```
j = -3;
for (i = 0; i < 3; i++) {
   int tmp = j + 2;

   if (tmp == 3 || tmp == 2) {
      j--;
   } else if (tmp == 0) {
      j += 2;
   } else {
      j = 0;
   }

   if (j > 0) {
      i = 3;   // break
   } else {
      j = 3 - i;
   }
}
```

5. In a letter to the editor of *CACM*, Rubin (1987) uses the following code segment as evidence that the readability of some code with gotos is better than the equivalent code without gotos. This code finds the first row of an n by n integer matrix named x that has nothing but zero values.

```
for (i = 1; i <= n; i++) {
  for (j = 1; j <= n; j++)
     if (x[i][j] != 0)
      goto reject;
  println ('First all-zero row is:', i);
  break;
reject:
 }
```

Rewrite this code without gotos in one of the following languages: C, C++, Java, or C#. Compare the readability of your code to that of the example code.

Cozum :

```
for (i = 1; i <= n; i++) {
   int sayac = 0;

   for (j = 1; j <= n; j++) {
      if (x[i][j] != 0)
         sayac++;
   }

   if (sayac == 0) {
      printf("First all-zero row is: %d\n", i);
      break;
   }
}
```