1
```
for (i = 10; i > 2; i--) {
#pragma HLS UNROLL
  a[i] = b[i] + a[i-1];
}
```

2
```
int i = 0;
while (i < 10) {
#pragma HLS UNROLL
  a[i] = b[i] + 2;
  i--;
}
```

3
```
int a = 0;
int b = 10;
while (a < b) {
#pragma HLS UNROLL
  a = a + 2;
  b = b+1;
}
```

1- The first code can be synthesised into a combinational circuit as it has a static *for*-loop bound that can be determined at compile time
2- The second code can also be synthesised into a combinational circuit as it has a static *for*-loop bound that can be determined at compile time
3- The third code cannot be synthesised into a combinational circuit as the loop bound is determined at run-time based on the value assigned to a and b variables in each iteration.