## 第5课：循环与“一半”问题

1. Cast

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| --- |
| double x = 3.5;  int y;  y = (int)x;  // x = y; |

一句话总结：当有精度损失的时候需要使用cast

1. Loop and a half

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| --- |
| private static final int SENTINEL = 0;  public void run(){  int total = 0;  int val = readInt(“Enter val: ”);//duplicate  while(val != SENTINEL){  total += val;  val = readInt(“Enter val: ”);//duplicate  }  printf(“Total = ” + total);  } |

优秀的编码方法：avoid duplicate code, even it’s one line

解决办法：取出重复区间代码重构

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| --- |
| private static final int SENTINEL = 0;  public void run(){  int total = 0;  while(true){  int val = readInt(“Enter val: ”);  if(val == SENTINEL)break;  total += val;  }  printf(“Total = ” + total);  } |

1. for versus while

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| --- | --- |
| for(init; test; step){  statements;  } | init  while(test){  statements;  step;  } |

* for循环用于有限迭代 while循环用于无限迭代
* 知道循环次数时使用for循环 不知道循环次数时使用while循环