

Trace for Loop with Continue

Declare and initialization

```
int cnt;  
float x=0, sum=0;
```

```
for (cnt = 0; cnt < 10; cnt++)  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    sum += x;  
}
```

Trace for Loop with Continue

```
int cnt;  
float x=0, sum=0;  
for (cnt = 0; cnt < 10; cnt++)  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    sum += x;  
}
```

Execute
initializer
cnt is now 0

Trace for Loop with Continue

```
int cnt;  
float x=0, sum=0;  
  
for (cnt = 0; cnt < 10; cnt++)  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    sum += x;  
}
```

(cnt < 10) is true
since cnt is 0

Trace for Loop with Continue

```
int cnt;  
float x=0, sum=0;  
  
for (cnt = 0; cnt < 10; cnt++)  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    sum += x;  
}
```

Read x value, assuming input x is
0.001

Trace for Loop with Continue

```
int cnt;  
float x=0, sum=0;  
  
for (cnt = 0; cnt < 10; cnt++)  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    sum += x;  
}
```

This is true as x is 0.001

Trace for Loop with Continue

```
int cnt;  
float x=0, sum=0;  
  
for (cnt = 0; cnt < 10; cnt++)  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    sum += x;  
}
```

Continue: goes to the end of loop
body

Trace for Loop with Continue

```
int cnt;  
float x=0, sum=0;  
  
for (cnt = 0; cnt < 10; cnt++)  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    sum += x;  
}
```



cnt is increased by 1

Trace for Loop with Continue

```
int cnt;  
float x=0, sum=0;  
  
for (cnt = 0; cnt < 10; cnt++)  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    sum += x;  
}
```

Compare cnt with 10.....

Trace while Loop with continue

Declare and initialization

```
int cnt = 0;  
float x = 0, sum = 0;
```

```
while (cnt < 10)  
{  
  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    ++cnt;  
  
    sum += x;  
  
}
```

Trace while Loop with continue

```
int cnt = 0;  
float x = 0, sum = 0;
```

```
while (cnt < 10)
```

```
{
```

```
    cin >> x;
```

```
    if (x > -0.01 && x < 0.01)
```

```
        continue;
```

```
    ++cnt;
```

```
    sum += x;
```

```
}
```

cnt<10 is true

Trace while Loop with continue

```
int cnt = 0;  
float x = 0, sum = 0;
```

```
while (cnt < 10)  
{
```

```
    cin >> x;
```

```
    if (x > -0.01 && x < 0.01)  
        continue;
```

```
    ++cnt;
```

```
    sum += x;
```

```
}
```

Read x, assuming x is 0.001

Trace while Loop with continue

```
int cnt = 0;  
float x = 0, sum = 0;
```

```
while (cnt < 10)  
{
```

```
    cin >> x;
```

```
    if (x > -0.01 && x < 0.01)
```

```
        continue;
```

```
    ++cnt;
```

```
    sum += x;
```

```
}
```

This is true as x is 0.001

Trace while Loop with continue

```
int cnt = 0;  
float x = 0, sum = 0;
```

```
while (cnt < 10)  
{
```

```
    cin >> x;  
    if (x > -0.01 && x < 0.01)
```

```
        continue;
```

```
    ++cnt;
```

```
    sum += x;
```

```
}
```

Continue: goes to the end of loop body

Trace while Loop with continue

```
int cnt = 0;
float x = 0, sum = 0;

while (cnt < 10)
{
    cin >> x;
    if (x > -0.01 && x < 0.01)
        continue;
    ++cnt;

    sum += x;
}
```

Cnt is still 0, and we compare cnt with 10 again, which is true...

Trace do while Loop with continue

Declare and initialization

```
int cnt = 0;  
float x = 0, sum = 0;
```

```
do  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    ++cnt;  
    sum += x;  
} while (cnt < 10);
```

Trace do while Loop with continue

```
int cnt = 0;  
float x = 0, sum = 0;  
  
do  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    ++cnt;  
    sum += x;  
} while (cnt < 10);
```



Read x, assuming x is 0.001

Trace do while Loop with continue

```
int cnt = 0;  
float x = 0, sum = 0;
```

```
do  
{
```

```
    cin >> x;
```

```
    if (x > -0.01 && x < 0.01)
```

```
        continue;
```

```
    ++cnt;
```

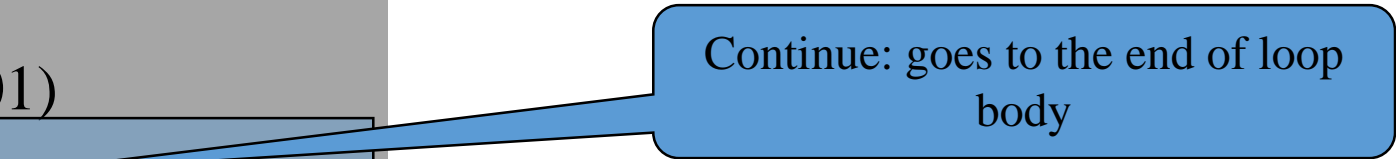
```
    sum += x;
```

```
} while (cnt < 10);
```

This is true as x is 0.001

Trace do while Loop with continue

```
int cnt = 0;  
float x = 0, sum = 0;  
  
do  
{  
    cin >> x;  
    if (x > -0.01 && x < 0.01)  
        continue;  
    ++cnt;  
    sum += x;  
} while (cnt < 10);
```



Continue: goes to the end of loop body

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```
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do  
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        continue;  
    ++cnt;  
    sum += x;  
} while (cnt < 10);
```

cnt is still 0, and we compare cnt with 10 again, which is true...