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Question 1

Give the dependence graph for the following loop.

```
for (i=0;i<n;i++) {
S1: B(i)=A(i)
S2: A(i)=A(i)+B(i+1)
C(i)=2*B(i)
}
```

Give the distance and direction vectors for the loop-carried dependences in the last question.

Source	Sink	Туре	Distance Vectors	Direction Vectors

Source, sink: Specify the references in the form S3:C(I) or S3: B(i) ...

Type: true, anti, output

Vectors: n-Tuples where n is the depth of the loop nest

Give the dependence graph for the following loop.

Give the distance and direction vectors for the loop-carried dependences in the last question.

Source	Sink	Туре	Distance Vectors	Direction Vectors

Question 2

Give the dependence graph for the following loop.

```
for (i=0;i<n;i++)
for (j=0;j<m;j++) {
S1: B(i-1,j)=C(i,j-2)
S2: C(i,j)=2*B(i,j+1)
}
```

Source	Sink	Туре	Distance Vectors	Direction Vectors