

Variable type →int compactDiscX

Variable assignment → compactDiscX= 150;

Variable declaration → int compactDiscX=150;

Use of variable →ellipse(200,200,compactDiscX,compactDiscY);

Coding Explanation:-

size(500,500);

rect(0,0,500,500);

int compactDiscX=150;

int compactDiscY=150;

```
fill(209,207,207);
ellipse(200,200,compactDiscX,compactDiscY);
fill(255);
ellipse(200,200,50,50);
```

Explanation:-

A variable is a location in the computers memory that stores a single piece of data. I related it to a CD stand, where CDs can be stored. it can be related to a single piece of data as it only stores CDs and nothing else.

We need to choose a meaningful variable name so that we can refer to it later. Like here I used the variable name compactDisc().

If later I choose to change the size of my compact disc then all I have to do is change the variable assignment.

Every time we declare a variable we are using up space in the computer's memory. (Every time we buy a new CD we are using up the space in the CD stand).