

Lab 7

- calculate NPV. The rate is a float and the cash flows and investment are in a list.
- create a function called NPV to calculate NPV
- create a function to calculate IRR. In order to calculate IRR you may approximate the following expression:
$$\text{rate} = \text{rate} * (1 - \text{NPV}(\text{CFList}, \text{rate}) / \text{invest})$$
- create a function for payback period

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In [151]: #Suppose you have the following cashflow  
CFList=[-1000, 200, 200, 300, 500]  
rate= 0.04
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In [152]: #calculate the NPV suggestion: iterate both by index and value using enumerate  
rate
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In [153]: print(NPV)
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71.3199380273798
```

```
In [154]: #create a function called NPV that returns the NPV value
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In [155]: print(NPV(CFList, rate))
```

```
71.3199380273798
```

```
In [156]:
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```
In [157]: print(irr(CFList))
```

```
0.06542842804025384
```

```
In [169]: #pay back period
```

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5  
4.4
```

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In [ ]:
```