```
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```

## In [31]:

```
import matplotlib.pyplot as plt
import pandas as pd
import numpy as np
```

## In [32]:

```
dn = pd.read_csv('DATA_UAS.csv')
dn
```

## Out[32]:

	student number	name	subject	grade
0	101	Andri	Programming Basic	80
1	102	Budi	Programming Basic	90
2	103	Cika	Programming Basic	100
3	104	Dedi	Programming Basic	100
4	105	Eka	Programming Basic	50
5	106	Feri	Programming Basic	40
6	107	Galih	Programming Basic	70
7	108	Huda	Programming Basic	70
8	109	Intan	Programming Basic	60
9	101	Andri	Web Programming	70
10	102	Budi	Web Programming	80
11	103	Cika	Web Programming	80
12	104	Dedi	Web Programming	90
13	105	Eka	Web Programming	90
14	106	Feri	Web Programming	60
15	107	Galih	Web Programming	95
16	108	Huda	Web Programming	85
17	109	Intan	Web Programming	90

# In [34]:

```
dn.loc[(dn['grade'] >=70), 'Description'] = 'pass'
dn.loc[(dn['grade'] < 70), 'Description'] = 'fail'
dn</pre>
```

## Out[34]:

	student number	name	subject	grade	Description
0	101	Andri	Programming Basic	80	pass
1	102	Budi	Programming Basic	90	pass
2	103	Cika	Programming Basic	100	pass
3	104	Dedi	Programming Basic	100	pass
4	105	Eka	Programming Basic	50	fail
5	106	Feri	Programming Basic	40	fail
6	107	Galih	Programming Basic	70	pass
7	108	Huda	Programming Basic	70	pass
8	109	Intan	Programming Basic	60	fail
9	101	Andri	Web Programming	70	pass
10	102	Budi	Web Programming	80	pass
11	103	Cika	Web Programming	80	pass
12	104	Dedi	Web Programming	90	pass
13	105	Eka	Web Programming	90	pass
14	106	Feri	Web Programming	60	fail
15	107	Galih	Web Programming	95	pass
16	108	Huda	Web Programming	85	pass
17	109	Intan	Web Programming	90	pass

```
In [36]:
```

```
dn['rata-rata'] = dn['grade'].mean()
f = dn[['student number', 'name', 'rata-rata']]
f
```

### Out[36]:

	student number	name	rata-rata
0	101	Andri	77.777778
1	102	Budi	77.777778
2	103	Cika	77.777778
3	104	Dedi	77.777778
4	105	Eka	77.777778
5	106	Feri	77.777778
6	107	Galih	77.777778
7	108	Huda	77.777778
8	109	Intan	77.777778
9	101	Andri	77.777778
10	102	Budi	77.777778
11	103	Cika	77.777778
12	104	Dedi	77.777778
13	105	Eka	77.777778
14	106	Feri	77.777778
15	107	Galih	77.777778
16	108	Huda	77.777778
17	109	Intan	77.777778

## In [37]:

```
dn ['rata-rata'] = dn['grade'].mean()
dn
```

### Out[37]:

	student number	name	subject	grade	Description	rata-rata
0	101	Andri	Programming Basic	80	pass	77.777778
1	102	Budi	Programming Basic	90	pass	77.777778
2	103	Cika	Programming Basic	100	pass	77.777778
3	104	Dedi	Programming Basic	100	pass	77.777778
4	105	Eka	Programming Basic	50	fail	77.777778
5	106	Feri	Programming Basic	40	fail	77.777778
6	107	Galih	Programming Basic	70	pass	77.777778
7	108	Huda	Programming Basic	70	pass	77.777778
8	109	Intan	Programming Basic	60	fail	77.777778
9	101	Andri	Web Programming	70	pass	77.777778
10	102	Budi	Web Programming	80	pass	77.777778
11	103	Cika	Web Programming	80	pass	77.777778
12	104	Dedi	Web Programming	90	pass	77.777778
13	105	Eka	Web Programming	90	pass	77.777778
14	106	Feri	Web Programming	60	fail	77.777778
15	107	Galih	Web Programming	95	pass	77.777778
16	108	Huda	Web Programming	85	pass	77.777778
17	109	Intan	Web Programming	90	pass	77.777778

```
In [38]:
```

```
x = dn['name']
y = dn['grade']

plt.bar(x,y)
plt.title('Mean of Final Exam Values')
plt.xlabel('name')
plt.ylabel('grade')
plt.show()
```

