```
programming_dictionary = {
  "Bug": "An error in a program that prevents the program from running as expected.",
  "Function": "A piece of code that you can easily call over and over again.",
}

print(programming_dictionary["Function"])

programming_dictionary
```

```
    A piece of code that you can easily call over and over again.
    {'Bug': 'An error in a program that prevents the program from running as expected.',
     'Function': 'A piece of code that you can easily call over and over again.'}
```

```
for key in programming_dictionary:
  print(key)
  print(programming_dictionary[key])
```

```
    Bug
    An error in a program that prevents the program from running as expected.
    Function
    A piece of code that you can easily call over and over again.
```

Coding excersice

```
student_scores = {
  "Harry": 81,
  "Ron": 78,
  "Hermione": 99,
  "Draco": 74,
  "Neville": 62,
}

student_grades ={}

for key in student_scores:
  score = student_scores[key]
  if student_scores[key]>90:
    student_grades[key] = "Outstanding"
  elif score>80:
    student_grades[key]="Exceeds Expectations"
  elif score>70:
    student_grades[key]="Acceptable"
  else:
    student_grades[key]="Troll"

print(student_grades)
```

```
    {'Harry': 'Exceeds Expectations', 'Ron': 'Acceptable', 'Hermione': 'Outstanding', 'Dracc
```

Nesting

```
capitals ={
    "France":"Paris",
    "Spain":"Madrid",
    "Colombia":"Bogotá",
    "Unites States":"Washington",
    "Germany":"Berlin",
}

#Nesting a list in a dictionary

travel_log={
    "France":["Paris","Lille","Dijon"],
    "Germany":["Berlin","Frankfurt","Hamburg"]
}

a=["A", "B", ["C","D"]]

#Nesting a dictionary in a dictionary

travel_log2={
    "France":{"cities_visited":["Paris","Lille","Dijon"]},
    "Germany":{"cities_visited":["Berlin","Frankfurt","Hamburg"], "total_visists":5},
}

#Nesting a dictionary in a list

travel_log =[
    {
    "country": "France",
    "visists":12,
    "cities":["Paris","Lille","Dijon"],
     },
    {
      "country": "Germany",
      "visists":5,
      "cities":["Berlin","Frankfurt","Hamburg"],
     },
    ]


def add_new_country(country,visits,cities):
  travel_log.append({"country":country,"visits":visits,"cities":cities})
  return travel_log

add_new_country("Russia", 2, ["Moscow", "Saint Petersburg"])
print(travel_log)
```

```
[{'country': 'France', 'visists': 12, 'cities': ['Paris', 'Lille', 'Dijon']}, {'country
```

Proyecto del dia

```
logo = '''
                         ___________
                         \         /
                          )_______(
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                          |       | | |               | | ''-.
                          |       |_| |_            _| |_..-'
                          |_______| '-' `'---------'` '-'
                          )"""""""(
                         /_________\\
                       .-------------.
                      /_______________\\
'''


print(logo)
a=input("What's your name?: ")
b=int(input("What's your bid?: $"))
l0=[]
l1=[]
l2=[]
c=True

while c==True:
  d={a:b}
  l0.append(d)
  e=input('Are there any other bidders? Type yes or no. ')
  if e == 'no':
    c=False
  elif e=='yes':
    a=input("What's your name?: ")
    b=int(input("What's your bid?: $"))
  else:
    print("Follow instructions!")
for i in l0:
  for j in i:
    l1.append(i[j])
    l2.append(j)
    bb=max(l1)
    aa=l2[l1.index(bb)]


print(f"The winner is {aa} with a bid of ${max(l1)}")
```

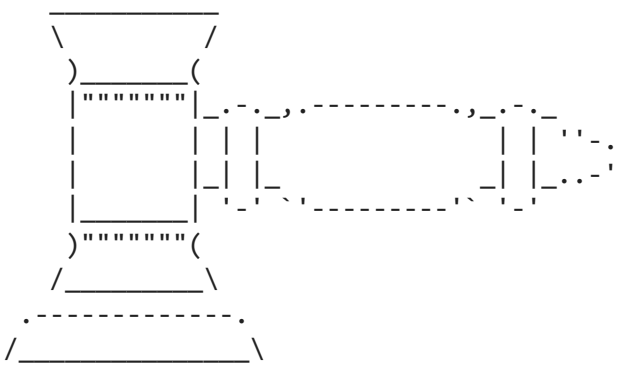

```
What's your name?: Salad
What's your bid?: $33
Are there any other bidders? Type yes or no. yes
What's your name?: Salad2
What's your bid?: $333
Are there any other bidders? Type yes or no. no
The winner is Salad2 with a bid of $333
```