julia-first-ex

November 7, 2021

1 Hi julia welcome

[7]:
```
name="mk"
```

[7]:
```
"mk"
```

[8]:
```
println("Hi Wecome")
```

```
Hi Wecome
```

[9]:
```
println("Hi $name, welcome")
```

```
Hi mk, welcome
```

[10]:
```
age = round(rand()*100)
```

[10]:
```
65.0
```

[11]:
```
println("Hi $name, welcome. We guess you age as $age")
```

```
Hi mk, welcome. We guess you age as 65.0
```

[12]:
```
arrayo = ["mk", "ms", "mya", "msb"]
```

[12]:
```
4-element Vector{String}:
 "mk"
 "ms"
 "mya"
 "msb"
```

[13]:
```
arrayo[1]
```

[13]:
```
"mk"
```

[14]:
```
rand(3, 2, 2)
```

[14]:
```
3×2×2 Array{Float64, 3}:
[:, :, 1] =
 0.0965377  0.799937
 0.114655   0.000451226
```

```
 0.374069   0.453103

[:, :, 2] =
 0.648417   0.261531
 0.338457   0.290224
 0.0506485  0.312058
```

[16]:
```
i=1
while i <= length(arrayo)
    person = arrayo[i]
    age = round(rand()*100)
    println("Hi $person we guess your age as $age")
    i+=1
end
```

```
Hi mk we guess your age as 6.0
Hi ms we guess your age as 33.0
Hi mya we guess your age as 32.0
Hi msb we guess your age as 89.0
```

[18]:
```
for p in arrayo
    println(p)
end
```

```
mk
ms
mya
msb
```

[28]:
```
m, n = 4, 4
A = zeros(m, n)
for i in 1:m
    for j in 1:n
        A[i, j] = i+j
    end
end
A
```

[28]:
```
4×4 Matrix{Float64}:
 2.0  3.0  4.0  5.0
 3.0  4.0  5.0  6.0
 4.0  5.0  6.0  7.0
 5.0  6.0  7.0  8.0
```

[29]:
```
C = [i+j for i in 1:m, j in 1:n]
C
```

[29]:
```
4×4 Matrix{Int64}:
 2  3  4  5
 3  4  5  6
 4  5  6  7
 5  6  7  8
```

[43]:
```
x = true
y = false
println((x, y))
(x | y) ? println(x) : println(y)
```

```
(true, false)
true
```

[44]:
```
function f(x)
    x^2
end
```

[44]:
```
f (generic function with 1 method)
```

[45]:
```
f(2)
```

[45]:
```
4
```

[47]:
```
f1 = x -> x^3
f1(2)
```

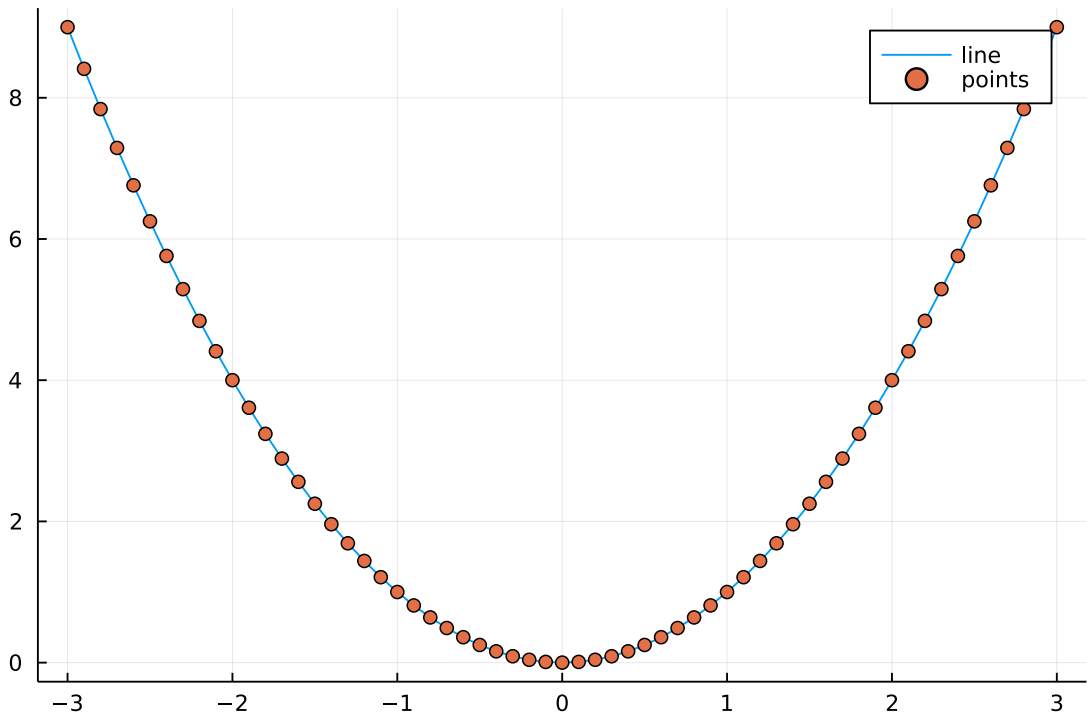
[47]:
```
8
```

[48]:
```
f3 = name -> println("Hi $name. How are you?")
f3("mk")
```

```
Hi mk. How are you?
```

[51]:
```
x = -3:0.1:3
f(x)=x^2
y = f.(x)
using Plots
gr()
plot(x, y, label="line")
scatter!(x, y, label="points")
```

[51]:


line
points
8
6
4
2
0
−3
−2
−1
0
1
2
3

[ ]: