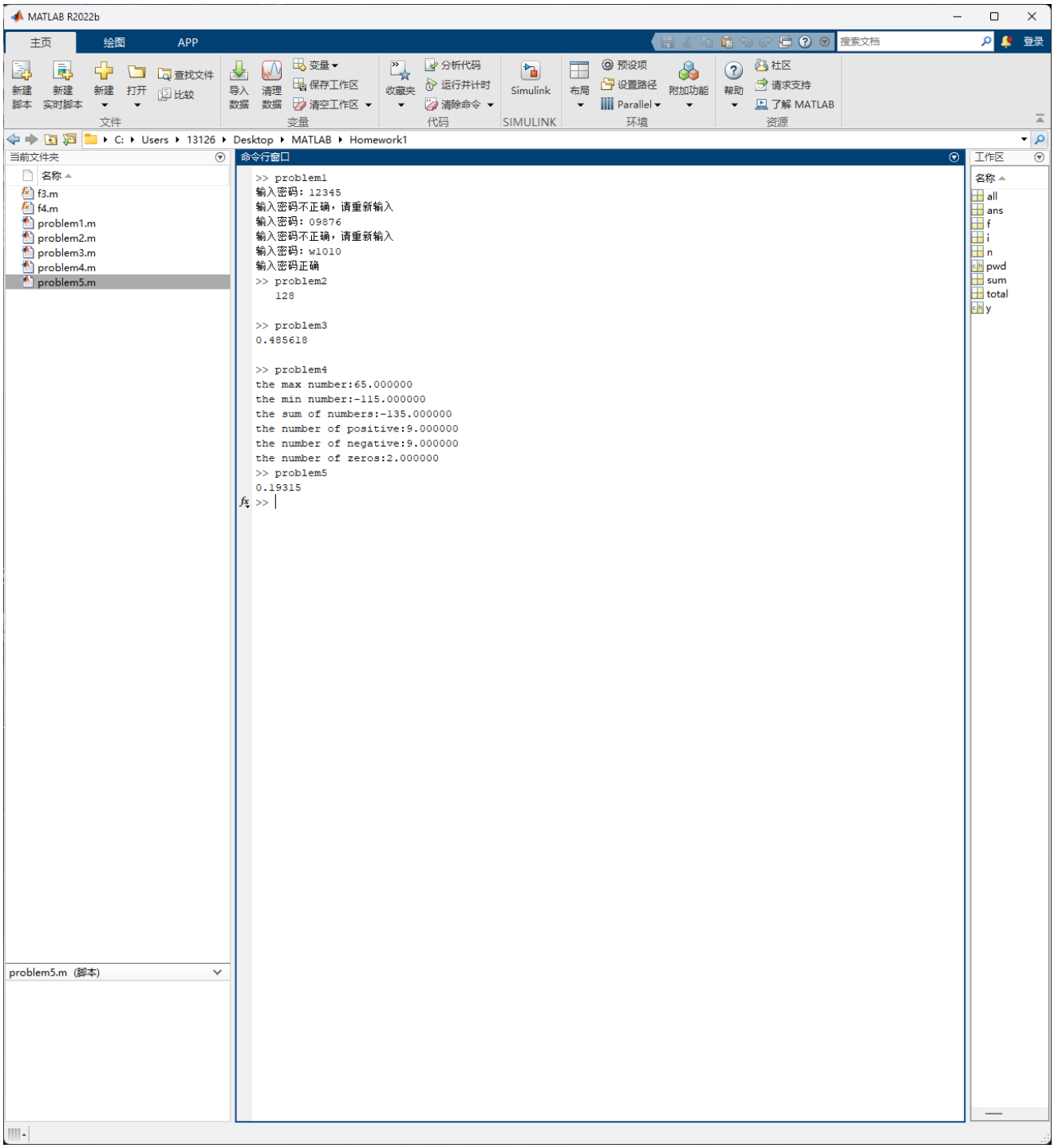
MATLAB 作业1

所有代码运行结果截图



Problem 1

```
while true
    pwd=input("输入密码: ",'s');
if strcmp(pwd,'w1010')
    disp("输入密码正确");
    break;
else
    disp("输入密码不正确，请重新输入");
end
end
```

Problem 2

```
total = 0.0;
for n=1:1:1000
    total = total + log(1+n*n);
    if total>=999
        disp(n-1);
        break;
    end
end
```

Problem 3

```
function total = f3(n)
total = 0;
for i=1:1:n
    total = total + i*(i+1);
end
end
```

```
all=f3(40)/(f3(50)+f3(20));
disp(vpa(all, 6));
```

Problem 4

```
function [fmax, fmin, fsum] = f4(f)
fmax = max(f);
fmin = min(f);
fsum = sum(f);
pos = 0;
neg = 0;
zer = 0;
for i=1:1:length(f)
    if f(i)>0
```

```
        pos = pos + 1;
    elseif f(i)<0
        neg = neg + 1;
    else
        zer = zer + 1;
    end
end
fprintf('the max number:%f\n', fmax);
fprintf('the min number:%f\n', fmin);
fprintf('the sum of numbers:%f\n', fsum);
fprintf('the number of positive:%f\n', pos);
fprintf('the number of negative:%f\n', neg);
fprintf('the number of zeros:%f\n', zer);
end
```

```
f=zeros(1,20);
f(1)=1;
f(2)=0;
f(3)=1;
for i=4:1:20
    f(i)=f(i-1)-2*f(i-2)+f(i-3);
end
f4(f);
```

Problem 5

```
sum = 0;
for i=1:2:2015
    sum = sum + 1/(i*(i+1)*(i+2));
end
y = sprintf('%.5f',sum);
disp(y);
```