Fastcampus

퍼포먼스 마케터를 위한 업무자동화 실전 CAMP

Day4. Google Apps Script

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Get Sheets from here!

https://docs.google.com/spreadsheets/d/1zd_RQskv8lBs9SibiHisOhveSOMXc8_rMBb3BTEIjZ0/edit?usp=sharing

Homework Review

```javascript
function fastCampus(num){
        if (num%15==0){
                return "fastcampus";
    } else if (num%3==0){
                return "fast";
    } else if (num%5==0){
                return "campus";
    } else {

                return num;
    }
}
```

Homework Review

```javascript
function doFastCampus(num){
        for (i=1;i<=num;i++){
                if (i%15==0){
                        console.log("fastcampus");
        } else if (i%3==0){
                        console.log("fast");
        } else if (i%5==0){
                        console.log("campus");
        } else {

                        console.log(i);
        }
    }
}
```
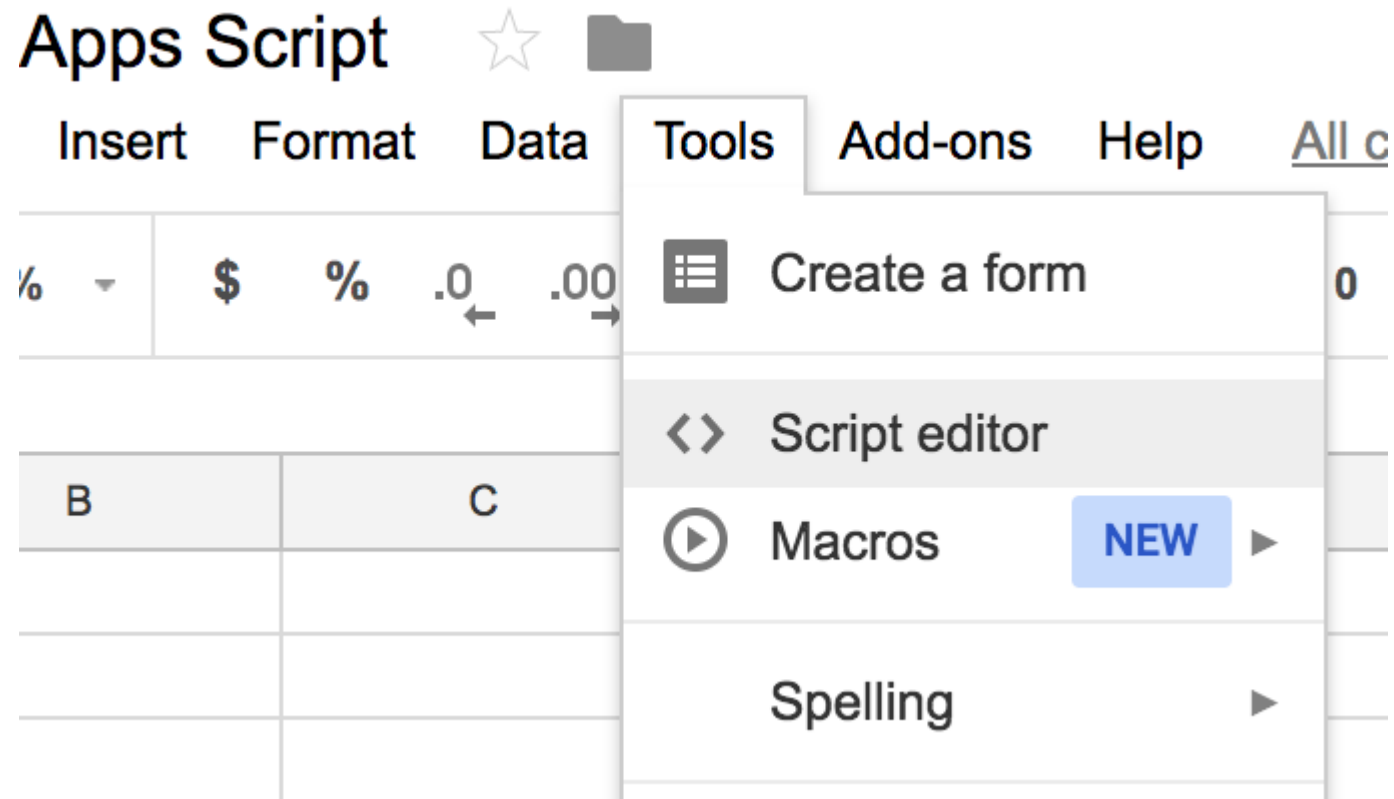
Google Apps Script

Google Apps Script

- javaScript을 기반으로 한 스크립트 언어
- Google Docs, Sheets, Slides, Forms 등의 G Suite 제품군의 사용자 정의 기능을 추가할 수 있음
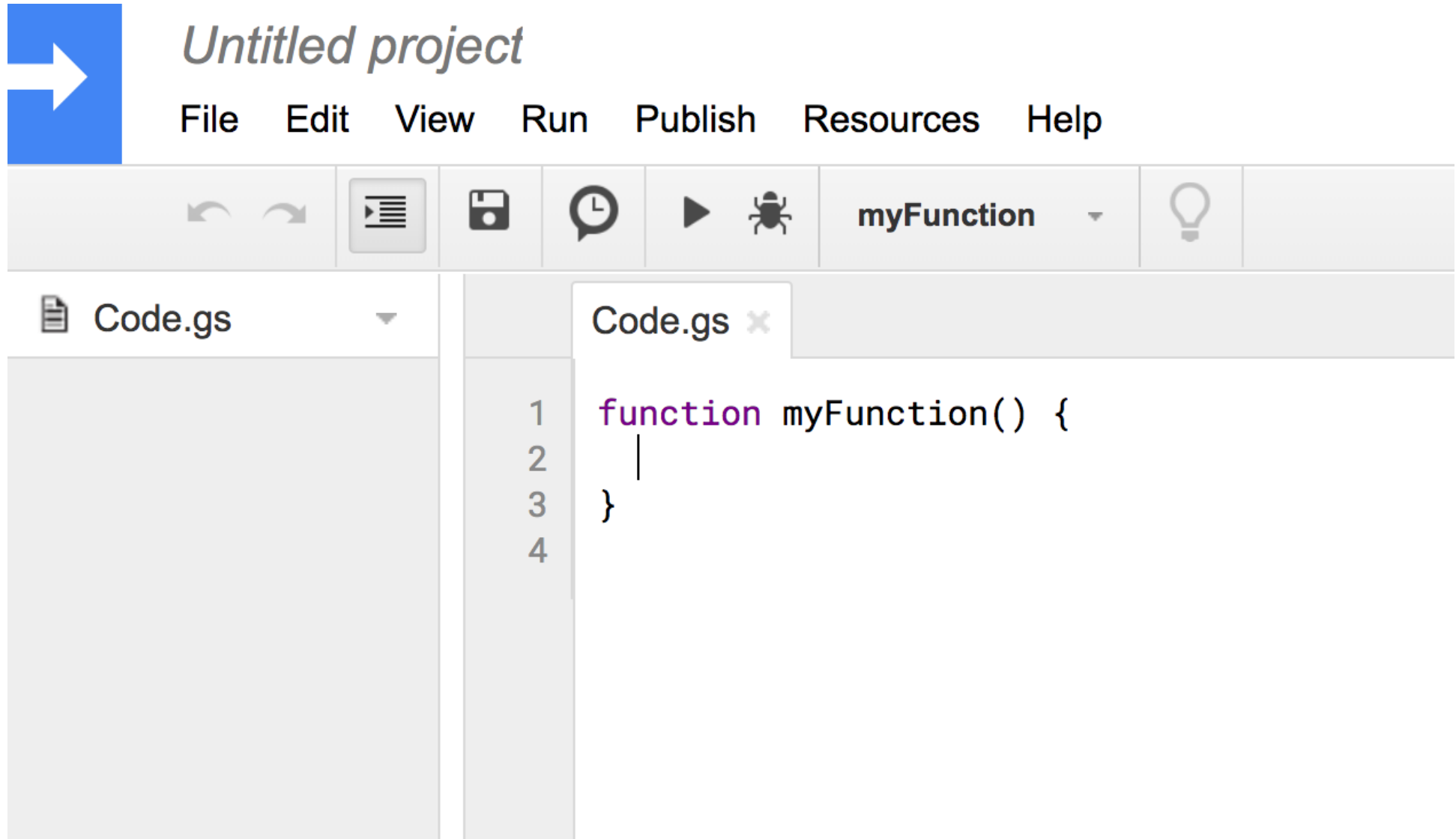- 스크립트 에디터를 내장하여 추가 프로그램이 필요없고, 구글의 서버에서 동작하므로 환경설정에 어려움이 없음

Let's start with Script Editor

Tools -> Script editor

Layout

Untitled project

File   Edit   View   Run   Publish   Resources   Help

Code.gs

Code.gs

```
1   function myFunction() {
2
3   }
4
```

Try "Hello Apps Script!"

```
function sayhello(){
        return "Hello Apps Script!"
}
```

Make vatCalculator

- 세전가격: 10000, 부가세율: 10% -> 소비자가격: 11000
- 소비자가격: 11000, 부가세율 10% -> 세전가격: 10000

vatCalculator

```javascript
function vatCalculator(price, flag){

  taxRate = 0.1;

  if (flag===true){
  // if flag is true, return value with vat
    return price*(1+taxRate);

  } else if (flag===false){
  // if flag is false, return value original price without vat
    return price/(1+taxRate);
  }
}
```

Send email with MailApp

Send email with MailApp

```
function sendMail(){
    var mailAddress = 'your email address';
    var mailContents = 'test mail success?';
    MailApp.sendEmail(mailAddress, 'Test mail', mailContents);
}
```

Send email with MailApp

Send Repetitive mails

```javascript
function sendSuggestion(){
  var sheet = SpreadsheetApp.openById('sheet id')
    .getSheetByName('MailPractice');
  var dataRange = sheet.getRange(2, 2, 2, 3);
  var data = dataRange.getValues();

  for (var i=0;i<data.length;i++){
    var message = sheet.getRange("A2").getValue();
    var mailAddress = data[i][0];
    var name = data[i][1];
    var greeting = '안녕하세요 ' + name + '님\n';
    var content = greeting + message;
    Logger.log(name);
    Logger.log(mailAddress);
    Logger.log(content);

    var progress = data[i][2];
    if (progress != "Sent"){
      MailApp.sendEmail(mailAddress, greeting, content);
      sheet.getRange(2+i, 2+2).setValue("Sent");
      SpreadsheetApp.flush();
    }
  }
}
```

Did it work?

Get values from sheets

```javascript
var dashboard = SpreadsheetApp.openById('sheet id')
    .getSheetByName('sheet name');
var nameRange = dashboard.getRange(2, 1, 22, 1);
var dataRange = dashboard.getRange(2, 10, 22, 1);
var names = nameRange.getValues();
var data = dataRange.getValues();
for (i=0;i<names.length;i++){
    Logger.log(names[i][0], data[i][0]);
}
```
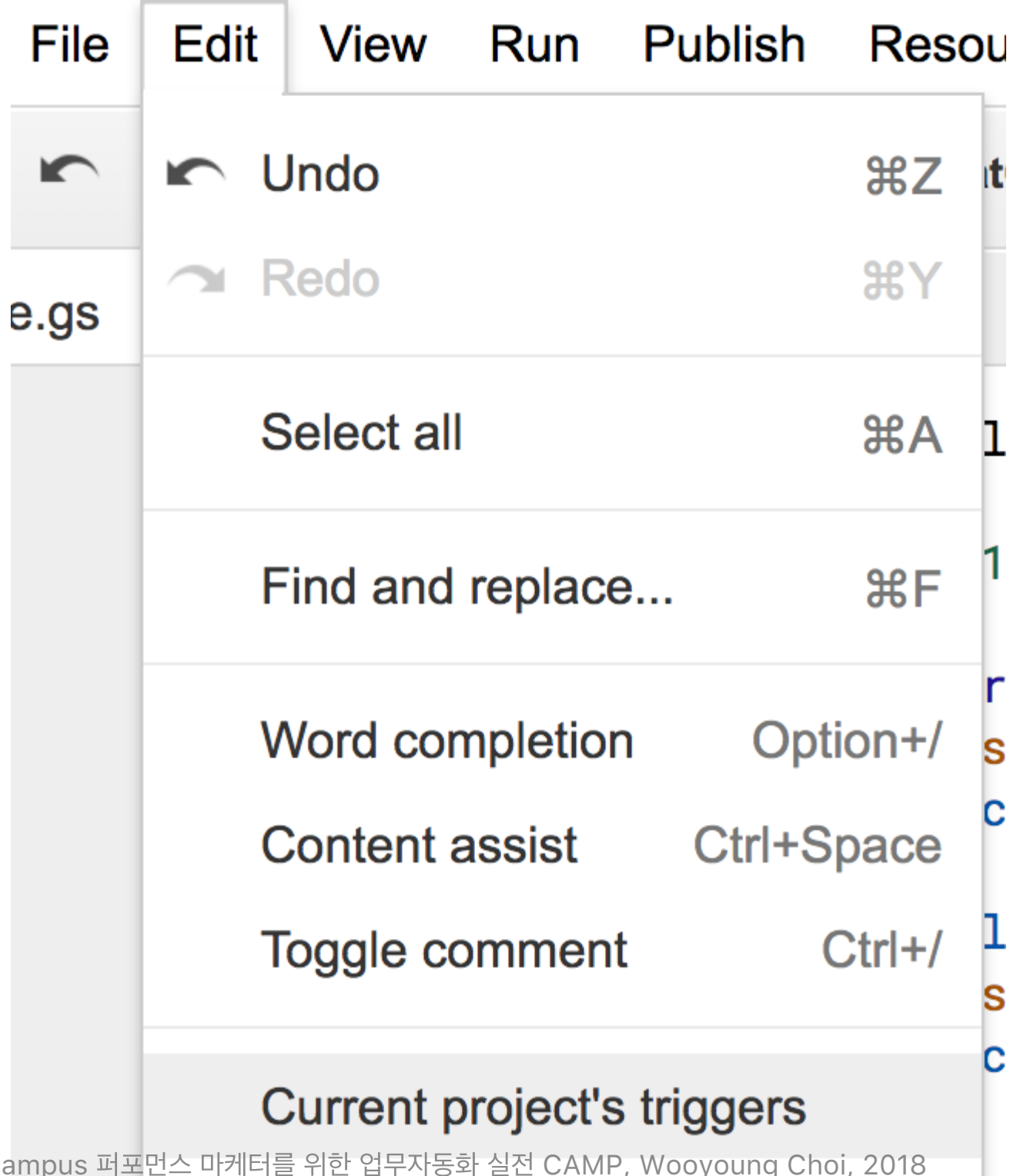
mail daily report

- Send email with MailApp + Get Values from shees

Answer

```
function dailyReport(){
  var mailAddress = 'mail address';

  var dashboard = SpreadsheetApp.openById('sheet id')
      .getSheetByName('sheet name');
  var nameRange = dashboard.getRange(2, 1, 22, 1);
  var dataRange = dashboard.getRange(2, 10, 22, 1);
  var names = nameRange.getValues();
  var data = dataRange.getValues();

  var mailContents = 'Daily Report\n 섹터별 daily CPA\n';

  for (i=0;i<names.length;i++){
    mailContents = mailContents +
    names[i][0] +
    ": " +
    data[i][0] + "\n";
    Logger.log(mailContents);
  }
  MailApp.sendEmail(mailAddress, 'Daily Report', mailContents);
}
```

Add Scheduler in Google Apps Script

File   **Edit**   View   Run   Publish   Resou

↶   ↶ Undo   ⌘Z   t

.gs   ⤳ Redo   ⌘Y

                                 Select all   ⌘A   1

                                 Find and replace...   ⌘F   1

                                 Word completion   Option+/   r
                                                                    s
                                 Content assist   Ctrl+Space   c

                                 Toggle comment   Ctrl+/   1
                                                                    s

                                                                    c

                                 Current project's triggers

Add Scheduler in Google Apps Script

Current project's triggers

No triggers set up. Click here to add one now.

Save   Cancel

Add Scheduler in Google Apps Script

Current project's triggers

Run	Events		
✕ vatCalculator	Time-driven	Day timer	6am to 7am
	notifications		

Add a new trigger

Add Scheduler in Google Apps Script

Current project's triggers

Run	Events		
☒ vatCalculator ↕	Time-driven ↕	Day timer ↕	6am to 7am ↕
	notifications		
☒ fastcampus ↕	From spreadsheet ↕	On change ↕	notifications

Add a new trigger

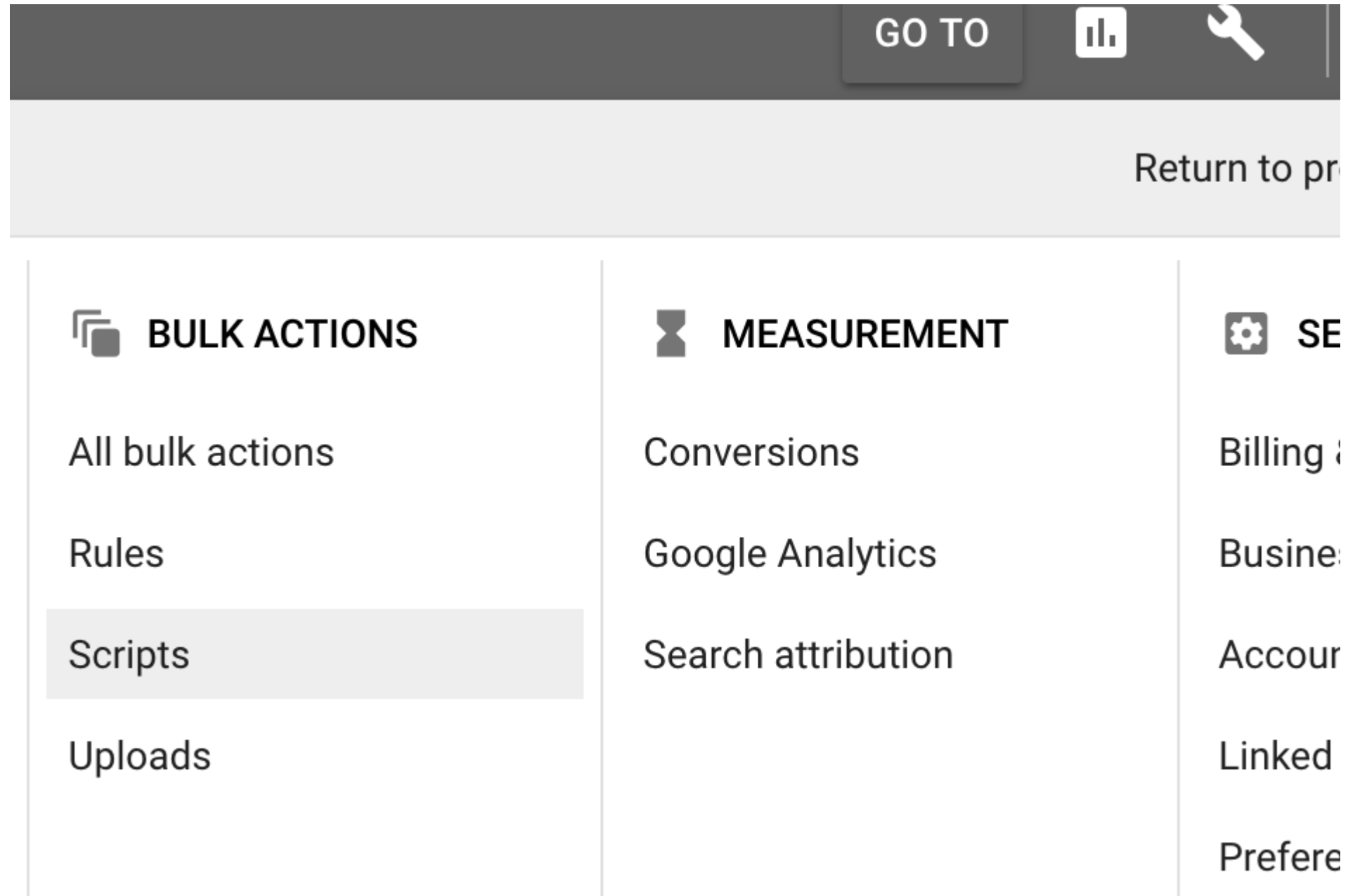# Ads Customize

Google Adwords to Google Ads

Start Ads Script

Start Ads Script

All bulk actions	SCRIPTS	SCRIPT HISTORY
Rules		
Scripts	+	
Uploads	Script ↑	Created by

Start Ads Script

Scripts > New script

Script name: * Unnamed script

> ⚠ Scripts make changes on a user's behalf. You must authorize scripts before they can make any changes. Learn more

```
1 function main() {
2
3 }
```

Google

Hi Clifford

ulgoon89@gmail.com

Unnamed script wants to

● Manage your AdWords campaigns ⓘ

Allow Unnamed script to do this?

By clicking Allow, you allow this app to use your information in accordance to their terms of service and privacy policies. You can remove this or any other app with access to your account in My Account

CANCEL   **ALLOW**

Start Ads Script

Scripts > New script

Script name: * Unnamed script

```
1 function main() {
2
3 }
```

10 keywords with most impressions yesterday

```javascript
function main() {
  var keywords = AdWordsApp.keywords()
      .orderBy("Impressions DESC")
      .forDateRange("YESTERDAY")
      .withLimit(10)
      .get();

  Logger.log("10 keywords with most impressions yesterday");
  while (keywords.hasNext()) {
    var keyword = keywords.next();
    Logger.log(keyword.getText() + ": " +
        keyword.getStatsFor("YESTERDAY").getImpressions());
  }
}
```

See result!


```
                                            
CHANGES              LOGS
                    _____

10 keywords with most impressions yesterday
python tutorial: 0
codecademy python: 0
python class: 0
```

Pause Keywords

```javascript
var TO_NOTIFY = "your@email.com";
function main() {

  var kwIter = AdWordsApp.keywords()
    .withCondition("Impressions = 0")
    .forDateRange("ALL_TIME")
    .withCondition("Status = ENABLED")
    .withCondition("CampaignStatus = ENABLED")
    .withCondition("AdGroupStatus = ENABLED")
    .get();

  var toPause = [];
```

Pause Keywords

```javascript
while (kwIter.hasNext()) {
  var kw = kwIter.next();
  toPause.push(kw);

  if(AdWordsApp.getExecutionInfo().isPreview() &&
     AdWordsApp.getExecutionInfo().getRemainingTime() < 10) {
    break;
  }
}

for(var i in toPause) {
  toPause[i].pause();
}
```

Pause Keywords

```
MailApp.sendEmail(TO_NOTIFY,
                  "AdWords Script Paused "
                  +toPause.length
                  +" Keywords.",
                  "Your AdWords Script paused "
                  +toPause.length
                  +" keywords.");
}
```