SWAP

INTRODUCTION

The human brain weighs about 1.3kg. While only 3% of the body weight, it uses 20% of the oxygen and half the sugar in your blood. It contains 10,000,000,000 neurons (each of which is connected to an average of 60,000 others) and an even larger number of supportive glial cells. It comprises two halves of cortex, a smaller organ called the cerebellum and is connected to the spinal cord via the brain stem.

It is more mysterious than the centre of the atom, and less understood than the Big Bang.

The nature of intelligence has been theorised about by everyone from Freud to Plato, from St. Augustine to Alan Turing. The brain has been dissected, injected with chemicals, given electric shocks, cut in half, and had every conceivable piece sliced off in the attempt to persuade it to give up its secrets. Scientists have tried measuring intelligence with IQ tests, by the volume of the brain, the quality of the senses, reaction times and even by the bumps on the head. They have attempted to simulate it with artificial intelligence, but somehow computers always end up fast but stupid.

Intelligence remains mysterious and ill-defined. It allows us to profit from experience and to see beyond our immediate surroundings. With it we can write music, or build better bombs.

How it relates to the 1.3kg of grey matter, and how 10,000,000,000 neurons somehow make it happen, remains an enigma.

Intelligence is something you demonstrated by buying SWAP, and something you will need when playing it.

LOADING INSTRUCTIONS

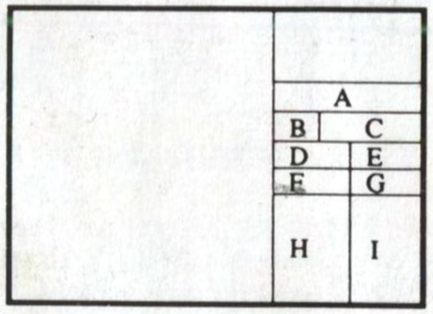
Important Notice

You should keep the SWAP disk in the drive while playing the game. It should not be write-protected, because high scores are saved on it. Do not remove the disk from the drive while it is being accessed.

Each level of SWAP has board of coloured tiles which you are attempting to destroy. Move the cursor with either the joystick or mouse to the intersection of two adjacent tiles. Click, and they will swap places. If a tile is now next to one of the same colour, then both will disappear. Click on a few other pairs to get the idea.

The more tiles you can destroy in the smallest number of moves, the higher your score.

A	Score
B	Stars
C	Time Limit
D	Undo
E	Quit
F	Avalanche
G	Count
H	Supplementary Tiles
I	Credits



FINISHING A LEVEL

SWAP monitors your performance to see how skilfully you are playing. Even if you aren't clever enough to clear the whole board, you may still play well enough to proceed to the next level.

Your progress is indicated by eight stars (B) on the right-hand side of the screen. You are awarded stars as you accumulate points (A), with the difficulty of the level being taken into account. When you have all eight stars, you will be allowed to progress to the next level.

At any point in the level you can click on the QUIT icon (E). This takes you to the summary screen, which gives you statistics on the level you have just been playing. From here you can QUIT the competition, CONTINUE the level you were on or proceed to the NEXT LEVEL. The NEXT LEVEL icon will only be available if you have won all eight stars.

Which level you proceed to is determined by your performance on the previous one. So if you play well, you may jump straight to level 90 after level 1 !

THE SCORE

Your overall score (A) is cumulative over the levels and can be entered into the high-score table, which is saved to disk. It is displayed on the top right of the game screen.

PC Compatibles

Insert your disk into drive A. If the prompt is already A:> then just type SWAP and press RETURN. If not, type A: and press RETURN first.

You can install SWAP on your hard disk. First, make sure that the hard disk is the current drive (the prompt should be C:> or D:>)- Insert the SWAP disk into drive A and then type the following:

MD SWAP
CD SWAP
COPY A:*.*

To run SWAP after installation, change to the SWAP directory on the hard disk and type SWAP. You will need to leave the original game disk in Drive A when playing SWAP from the hard disk; this is our security against piracy.

AMIGA

At the Workbench prompt screen, insert the SWAP game disk. If you have an Amiga 1000, you will need to insert a Kickstart disk first.

ATARI ST/STE

Turn the monitor on first. Insert the SWAP game disk into the computer and turn on the ST.

COMMODORE 64 AND 128

Turn on the computer. Switch to 64 mode if you have a CBM 128. For the cassette version press SHIFT and RUN/STOP together. For the disk version type LOAD "*",8,1.

AMSTRAD CPC

Put the disk into your disk drive and type RUN "SWAP". See page 9 for details of the Amstrad version.

PLAYING SWAP

GETTING STARTED

Load the game. When you get to the MENU screen use the joystick or mouse to click on the COMPETITION ICON on the left. You should get the introduction screen to LEVEL 001 next; ignore it and click to get to the game screen.

EXTRA FEATURES

Different levels contain different features, that may help or hinder you.

SUPPLEMENTARY TILES (H) are available on many levels. Click on a supplementary tile to pick it up. Click on the board to place it.

AVALANCHE (F) is very useful towards the end of the game. It drops all tiles down to fill any available spaces.

On harder levels you are subject to a TIME LIMIT (C).

CREDITS (I) make the game much harder, and are reserved for advanced levels. These appear as a stack of ingots on the bottom right of the screen. The silver ingots are worth 1 credit, the gold ingots 10 credits and the diamonds 100 credits.

A single SWAP costs two credits. Destroying a tile gains a credit. So a swap that destroyed two tiles would be a net gain of zero. If you cannot 'afford' to make a move the computer will not let you.

Each supplementary tile costs 10 credits, while an avalanche costs a massive 100 credits.

UNDO (D) allows you to go back a move. This is available on all levels.

PRACTICE LEVEL

PRACTICE is available from the main menu. It allows you to construct your own game of SWAP.

Clicking on PRACTICE produces a window of icons. You can select the number of colours you want, the shape of tiles and whether or not to include credits, time limits, avalanches and supplementary tiles.

BITS AND PIECES

The INTRODUCTORY SCREEN to each level of the competition gives details of the game you are about to play, showing which tiles and features are included.

SAVE: The game can be saved at any point in the competition. Click on QUIT while playing, then select SAVE on the blue summary screen. After the game has saved, select CONTINUE.

LOAD: The saved game can be loaded by selecting LOAD at the main menu.

THE AMSTRAD VERSION

The Amstrad version of SWAP is slightly different to the others. The default mode is practice; to play a competition you must click on OPTIONS at the main menu and click on the cup symbol. Then click on the PLAY icon on the main menu.

In this version there are no stars on the screen, although the principle is the same. Whether or not you proceed to the next level depends on your performance, not on whether you destroy every single brick.

THREE WAYS TO RAISE YOUR IQ

There's a myth that IQ tests are a foolproof, objective way to tell how 'intelligent' somebody is. In fact, IQ scores are affected by all kinds of factors such as cultural background, tiredness on the day and most of all, practice. Despite this, there are still some who insist on IQ tests at school, IQ tests at job interviews, even IQ tests in scientific research !! Beat the bozos with this handy SWAP guide to high scores in IQ !

1. Practise IQ tests! Like any exam, familiarity with the type of questions will boost your score. Buy a book of IQ tests, do a page a day, and watch your brain bulge !

2. Number sequences are child's play, if you approach them methodically. The following SWAP technique will make mincemeat out of most of them ! So simple, a computer could do it !

First, check to see if each number can be made by multiplying its neighbour by a whole number. If so, write the multipliers down under the original sequence. Failing that, write down the differences between each number instead. Now repeat the process on this new sequence until it's obvious what the next number will be. Now work backwards through the rows until you have the next number in the original sequence. Here are some examples:

Original sequence is 381 378 373 366 357 ?

There's no whole number multiplier so write down the differences:

```
381  378  373  366  357 ?
   -3   -5   -7   -9
```

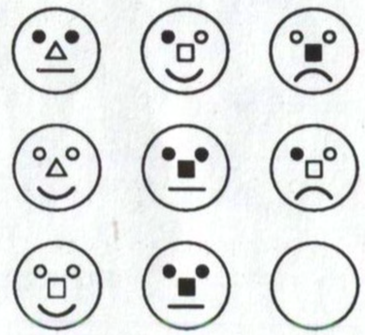
There's still no whole number multiplier so write down the differences on the new sequence:

```
381  378  373  366  357 ?
   -3   -5   -7   -9
     -2   -2   -2
```

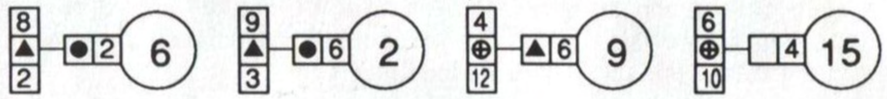
Aha ! So add another -2 on the bottom sequence. This means the next number on the middle sequence is -11 and that makes the last number on the original sequence 346.

```
381  378  373  366  357  346
   -3   -5   -7   -9   -11
     -2   -2   -2   -2
```

3. Complete the sequence.



4. Complete the sequence.



5. Supply the missing number.

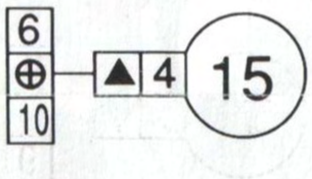
2, 5, 11, 23, 47, ?

ANSWERS

1. SWAP

2. 30

3. 

4. 

5. 95

Easy eh ? Here's another:

0 3 15 63 ?
3 12 48 (No multiplier, so write down differences)
4 4 (Aha ! Each number in the second sequence is four times the last)

0 3 15 63 255 (The answer is 255)
3 12 48 192
4 4 4

Here are some 'hard' number sequences to try:

0 2 8 18 ?
118 199 226 235 ?
53 48 50 45 47 ?
1 1 2 3 5 8 13 21 ? (The Super SWAP method DOES work on this one too. Compare the first sequence you derive with the original).

3. Play SWAP every day !

THE SWAP TEST

Select PRACTICE. Choose small square tiles, avalanche on, supplementary tiles off, time limit off, credits off and only TWO colours.

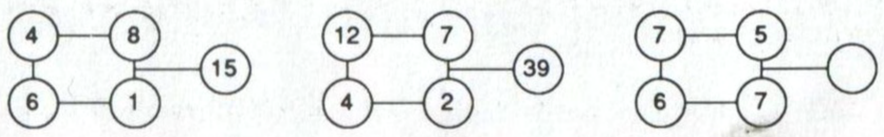
Can you completely clear this level in only THREE moves ?

What is the least number of moves WITHOUT using an avalanche ?
Here are some more SWAP tests to try.

1. Supply the missing word.

24 + 12 + 14 + 11 + 6 + 7 + 22 + 9 = COMPUTER
11 + 26 + 15 + 26 + 24 + 22 = PALACE
8 + 4 + 26 + 11 = ?

2. Complete the sequence by supplying the missing number.



CREDITS

SWAP was designed and programmed by MICROIDS.

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