My Wife says

I have 2 jobs

Driving & Tech Support!
A little about my credentials!

*I started using computers on a regular basis about 20 years ago.

*Shortly after I built my first computer, I got the bug to work on computers.

*I am almost completely self taught and have learned some of my biggest lessons from my biggest mistakes!
How do we use computers in everyday life?

Work
Education
Research
Medicine
Data Storage music, movies, pictures, memories
Social Networking
Gaming
Entertainment
E-banking
E-shopping
Graphics and architectural designs
Sharing of knowledge
Day planners/organizers
Writing
Publishing
Communication
### How do we use computers in RADIO life?

<table>
<thead>
<tr>
<th>Packet</th>
<th>Software Defined Radio</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTTY</td>
<td>Logging</td>
</tr>
<tr>
<td>Satellite Tracking</td>
<td>EchoLink</td>
</tr>
<tr>
<td>Call Sign Lookup</td>
<td>APRS</td>
</tr>
<tr>
<td>Research our radios</td>
<td>Amateur Television</td>
</tr>
<tr>
<td>Program our radios</td>
<td>AMateur Teleprinting</td>
</tr>
<tr>
<td>Airmail</td>
<td>Over Radio</td>
</tr>
</tbody>
</table>
Looks like we have a lot of reasons to maintain and repair our computers!
This is NOT how to fix your computer!
We have all been there, even me!
Trust me, it just makes it worse!
So what are the enemies of your computer?

- You
- Heat
- Dust
- Viruses
- Malware
So, time for some Geek Terms!
You

The end user of your computer!
The person that will click on just about anything on the Internet because it is there!
Heat

External case temperature should always be below 27°C (80°F), with the best temperatures around 18°C (65°F).
Dust

Consists of particles in the atmosphere that come from various sources such as soil dust lifted by weather, volcanic eruptions, and pollution. Dust in homes, offices, and other human environments contains small amounts of plant pollen, human and animal hairs, textile fibers, paper fibers, minerals from outdoor soil, human skin cells, burnt meteorite particles and many other materials which may be found in the local environment.
Computer Viruses

A computer virus is a computer program that can replicate itself and spread from one computer to another. The term "virus" is also commonly, but erroneously, used to refer to other types of malware, including but not limited to adware and spyware programs that do not have a reproductive ability.

Viruses are generally meant to DAMAGE your computer!
Malware

Computer worms, ransomware, trojan horses, key loggers, most rootkits, spyware, dishonest adware, malicious BHOs (Browser Helper Objects) and other malicious software. The majority of active malware threats are usually trojans or worms rather than viruses.

Malware is meant to get your information, hold you hostage, spy on you and generally annoy you!
So how do we fix these problems?

We'll take each one on its own!
You!

Information!
Information!
Information!

You are not infected until you click on the add that says you are INFECTED!
Which brings me to the first of four programs that I use to keep all of my computers running in tip top shape!

Ccleaner

Ccleaner is free! They have a paid version. No I didn't spell it wrong. There are 2 C's for a reason. The first stands for CRAP!

(Crap, Stuff, Sh*T)

The stuff that is clogging your computers hard drive. Temp files, browser files, registry garbage.
First click on the picture to go to Piriform's website. Download Ccleaner and Install it on your computer!

Once you've installed the program go to the next slide!
This is what Ccleaner looks like on your screen!
This is information about your computer.
These are 4 different tabs that will help you clean your computer.
This is all the different CRAP!!
There are 2 tabs!
Check these options to make sure you don't get rid of Recent Docs if you like to use them!
Remove check from crap you want to keep!
Let's get started
Make sure your on this tab!

Click here
To start!
HELL YES!
Ccleaner is cleaning your system!
This is all the crap Ccleaner found. If this is the first time you have run this program it will a lot more than this. Ccleaner can take a couple of minutes or an hour or 2 depending on amount of CRAP!
Make sure you have Selected Registry tab!

Click Here To Start!
Ccleaner is cleaning your system registry!
IT FOUND CRAP!

<table>
<thead>
<tr>
<th>Problem</th>
<th>Data</th>
<th>Registry Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing MUI Reference</td>
<td><code>C:\Program Files\Cool Timer\ct.exe</code></td>
<td><code>HKCU\Software\Classes\Local Settings\Software\Microsoft\Windows\Sh</code></td>
</tr>
</tbody>
</table>
Click here To fix Issues!
It will then ask where To save file. Make Sure you know where You have these so You can access in an Computer emergency!

If you run Ccleaner on A regular basis you can Skip this step. Should be done at least Once a month!
See, told you so!

So save the file. No need to change name. Includes date and time.
Click here to fix issues. If you have more than one issue, it will ask if you want to fix all. The answer is YES!
Close the window. Start over at part 2 until you see the next screen!
That is how we like our Computers!
The are extra tools that come With Ccleaner. Be very Careful with this stuff!
In the options tab under the Settings tab you can change some options.

If you think you are having problems, run CCleaner when the computer starts.

You can also change the Secure Deletion passes. I usually go with Complex Overwrite 7 passes!

I run CCleaner at least once a week.

That's it for CCleaner!
HEAT!

Desktop Computer  Laptop Computer
HEAT!

Desktop Computer

Desktop computers generally have fairly good ventilation. 3 to 4 fans including one in the power supply and one over the CPU. Keep in well ventilated area. You can also add fan to front during hot weather. If you are hot, so is your computer!
HEAT!

You moved again, human. Why did you move? Did I give you permission to move?

This is the ONLY laptop you should have on your lap top!!

Laptops only have ONE fan directly over the CPU! Limited Circulation! You'll notice that this kitty is doing it right. A flat, solid surface!
HEAT!

IF YOU HAVE ONE OF THESE...

Laptop Computer

Laptop Cooler
YOU SHOULD HAVE ONE OF THESE! Provides more ventilation and 2 additional FANS.
HEAT!

I leave Desktops on 24/7/365. About the only time they are shut down is power outage or cleaning. Turn off monitors and older printers.

I turn off Laptop Computers when I am done with them or when I go to bed.
You can use any of the above items for cleaning your computer!

Make sure you have no power to the computer!

Go easy with all the above items!
Which brings me to the second of four programs that I use to keep all of my computers running in tip top shape!

Avast!

Avast anti-virus is free. They do have a paid version. I have been using the free version for a number of years. I have had very few problems.
Viruses!
Click on the picture to go to Avast's website. Download Avast Free and Install it on your computer!

Once you've installed the program go to the next slide!
You should have a screen that looks like this.
Let's get started! Click on the maintenance tab!
Click on the Registration tab! Register your software. It's free and good for one year. If you don't the program will STOP WORKING!!
That is all you really have to do with this program. Avast runs in real time. As long as your computer is running so will it! There are a couple of things that I will cover.

Click Here To go to Security Tab!
Next click on the Antivirus tab you should have a screen that looks like the next screen!
We'll make of couple of changes. First we will change the Default scan to Full system scan. So scroll down to Full system scan.
Click here to select Default Scan!

Click here to turn on Scan PUP! Potentially Unwanted Program
Your screen should look like this! Before we leave this screen scroll down to Boot-time scan!

Scan Now
You can use the controls below to run a pre-defined scan or to create a custom scan of your own. Multiple scans can be run at the same time.

Full system scan
Performs an in-depth scan of the system (thorough but slower).

- **Scan mode:** Normal
- **Scan areas:** All hard disks, Rootkits (quick scan), Auto-start programs and modules loaded in memory
- **Schedule:** No
- **Scan PUP:** On, Turn off

Removable media scan
Scans all removable media currently attached to the computer.
If you believe that your computer may have a virus then you should schedule a Boot-time scan. This will load Avast and run before Windows starts. This is probably the best way to handle a computer with a probable virus. Now back to the home screen!
Back on the home screen. Now if you click the scan button, Avast will do a full system scan! Regardless if I think I am having problems or not, I will run a Avast Full System Scan ONCE A MONTH! The scan can take a couple of hours depending on how large your hard drive is and the processing power of your system! That is about it for AVAST! MAKE SURE TO REGISTER!
Which brings me to the third of four programs that I use to keep all of my computers running in tip top shape!

Spybot - Search & Destroy

Spybot is free. They also have a paid version. Spybot is used to find all sorts of Malware. Computer worms, ransomware, trojan horses, key loggers, most rootkits, spyware, dishonest adware, malicious BHOs(Browser Helper Objects) and other malicious software.
MALWARE!

Click on the picture to go to Spybot's website. Download Spybot-Search & Destroyer and Install it on your computer! It will also install TeaTimer, which is Spybot's real time protection.
When Spybot starts it will show you this window! If Spybot removes a program you didn't want to use it anyway! I check the box, Don't show again!
Click Here To Change To Advance Mode

Click Here To Change To Advance Mode

Spybot - Search & Destroy 1.6.2

Use this button to start scanning your system for spyware and all other threats detected by Spybot - Search & Destroy.

Use this button if you notice some problems that have occurred during a recent removal of problems, and you want to undo some changes.

This is very important: it is recommended to update the detections at least once a week!
They are serious! But there is a setting that I will show you later! Click yes!
First click here to Search for updates Even if you just Installed.

These are the advanced options. We'll get to them later!
This is where you are going To get your update. I always pick a mirror (Server) In the USA!
If all the boxes are not Checked. Put checks In them and then Click The download button!
Spybot is downloading your updates. Once it is done the download button will disappear. Click the Exit Button to return to Spybot!
Click here to have Spybot scan your computer!
Spybot is scanning your system. This can take a couple of hours depending on hard drive size, processor speed, and problems found!
That's how we like it! No Problems Found! If it did find problems, there will be a Fix problems button. Click on it to fix Problems. If that does not do it go to The advance settings and do a boot scan.

Now for that advanced stuff. Click on Settings.
Click Settings Again.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Change the language Spybot-S&amp;D appears in.</td>
</tr>
<tr>
<td>File Sets</td>
<td>Change which categories of threats should be searched for.</td>
</tr>
<tr>
<td>Settings</td>
<td>All the important settings.</td>
</tr>
<tr>
<td>Directories</td>
<td>Define which folders are used for downloads.</td>
</tr>
<tr>
<td>Skins</td>
<td>Change the color appearance of Spybot-S&amp;D.</td>
</tr>
<tr>
<td>Scheduler</td>
<td>Schedule Spybot-S&amp;D to run whenever you want it to.</td>
</tr>
<tr>
<td>Ignore products</td>
<td>Ignore some products during the scan.</td>
</tr>
<tr>
<td>Ignore cookies</td>
<td>Ignore some browser cookies during the scan.</td>
</tr>
<tr>
<td>Ignore file extensions</td>
<td>Define file extensions to be ignored during the Usage Tracks scan.</td>
</tr>
<tr>
<td>Ignore single entries</td>
<td>Allow previously ignored entries to be scanned for again.</td>
</tr>
<tr>
<td>Ignore System Internals</td>
<td>Define which internals should be ignored.</td>
</tr>
</tbody>
</table>
If you think your system is acting “funny”
Click on this to run Spybot on next system start
This will load Spybot before windows and do a
Through check!
That’s it for advanced setting.
You can try different things.
But use CAUTION!
Which brings me to the last of four programs that I use to keep all of my computers running in tip top shape!

TDSSKILLER

TDSSKiller is free! TDSSKiller takes care of vicious rootkits! Although Spybot is supposed to take care of rootkits, I have recently run into some that Spybot was unable to handle.
MALWARE!
Click on the picture to download TDSSKILLER. Download TDSSKiller and Extract the file. You can put it on your desktop for easy access! TDSSKiller does not actually install on your computer!
See, mine is on the Desktop!
Well Double Click on it! It's now going to do it by ITSELF!
So this is what TDSSKiller looks like when opened up. There is only one thing to do! Click on the Start Scan Button!

Just in case you missed it!
TDSSKiller is Running!

Scan in progress...

Finish: 00:00:31
Duration: 00:00:05
Processed: 63 objects, no threats found

Object: C:\Windows\system32\bthserv.dll

Stop scan
Now it is finished! It usually takes only a couple minutes!

I run this once a month, unless I think there is a problem!

And that is the way we like it!
I don't PAY for software! There is so much free and OPEN SOURCE software out there! Much of it is better than the paid versions! So if you are looking for a program, do a Google search for Open Source...Office, Publisher, Operating Systems or whatever!

Open Source Initiative
opensource.org/
Dedicated to managing and promoting the Open Source trademark for the good of the community. Includes a definition of 'Open Source', and a list of approved ...

Open source - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Open_source
In production and development, open source is a philosophy, or pragmatic methodology that promotes free redistribution and access to an end product's design ...
Open source software - List of Open Source Software - The Open Source Definition

Open source software - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Open_source_software
Open source software (OSS) is computer software with its source code made ...

SourceForge - Download, Develop and Publish Free Open Source... sourceforge.net/
maps.google.com/maps?hl=en&q=OPEN+SOURCE+(+++++++++++++++++++++++++)&bav=on,2,or.r_qf&bvm=bv.43287494,d.aWM&biw=1024&bih=513&um=1&ie=UTF
Finally! The answer to your computer questions?