# PRACTICAL NO:1

# LIFESKILL WORKSHOP CUM BOOTCAMP

## Day-1

### Session-1

It was an initiative taken by Nagindas Khandwala College to conduct this 3 day workshop for first year it and cs students in order to enhance their Lifeskill .The aim for organising such workshop was to inculcate several life skills into students to achieve success.It started with enthusiasm students entered hoping and jumping with music.Followed by a short speeches from principal “Dr.Ancy Jose”, vice principal“Dr. Mona Mehta”and the Facilitator “Dr.Sujata Singhi” .Later on Mrs.Sujata Singhi started up with an activity on fear. Everyone was given opportunity to participate and tell their fear and also few students were able to overcome their fear there itself. Students were divided and several group were formed randomly,which was just to bring students out of their comfort zone and work together in a team.

### Session-2

Each team had to sell their products i.e. the things they had with them but they cannot say it that what the object actually was they had to assume it something else. Each team sold their products by performing small skit on the stage.After thatstudents were assigned numbers and when numbers called that number from each group came in between and did the dance which they were asked to do. Some were asked to do belly dance, break dance and so on “Follow theLeader”dance was something each student enjoyed. Lastly first day ended with an emotional story. And students had a task to give their parents a rose and develop attitude of gratitude in them.

## Day-2

### Session-3

Beginning with second day students gathered with same excitement as of the first day. Students were asked to share their feelings after doing the task attitude of gratitude. Few of them had an emotional touch in their stories which made everyone’s eyes wet. To change the mood of students some songs were played and students danced on it. The students were asked to make a spaceship for the princess. The princess gave a list of her requirements in the spaceship she needed a bedroom, windows, spacious, etc. the Students were excited and started to make their spaceship as beautiful and as perfect they can with all their heart.

### Session-4

Students showed their spaceships to the princess one by oneFirstly every spaceship was displayed in an attractive manner. A short photo session was held and princesses viewed the different types of spaceship. Rock star night was held were in every student name was called and they were said to dance on the music as a Rock star. As every student had filled the Rock star form and the given music was played even students were given opportunity to sing as well. Rock star night seemed to be a DJ night. It just killed the stage fear to dance alone on the stage. Students felt themselves as a Rock star.

## DAY3:

### **Session- 5**:

Starting with day 3 firstly vision and mission were defined and difference for the same was understood by the students and an individual project of making vision boards with goals in life was done by the students. Students created different types of vision boards. Everyone’s vision board was unique as every individual has its own unique vision and goals in life. This gave a clear idea to an individual to have some vision as well as mission in life. Everyone set a goal in life and it was displayed on their board

### Session-6:

There was an activity to play musical instrument in order to understand difference between rhythm and noise. Students came up with different musical instrument. Everyone played their own instrument with the given rhythm and along with the rhythm. At the starting it was just a noise but later on it was a good rhythm. Lastly students were facilitated with certificates by the Facilitator and vote of thanks was given to “Dr Sujata Singhi by Cr’s of the class. Students also shared their experience of three days, which was a learning moment but we enjoyed it too. Principal Mam was called to get the feedback from the students. At the end a big vote of thanks was given to college and its faculty Starting with day 3 firstly vision and mission were defined and difference for understood by the students and an individual project of making vision board with the goals in life was done by the students. Students created different types of vision boards.There was activity to play

# PRACTICAL NO:2

# GREEN TECHNOLOGY

## Defination:

Green technology, also known as sustainable technology, takes into account the long- and short-term impact something has on the environment. Green products are by definition, environmentally friendly. Energy efficiency, recycling, health and safety concerns, renewable resources, and more all go into the making of a green product or technology

## Examples:

 10 examples of green technologies that are environmentally-friendly:

### Wastewater treatment

In this field, there are few technological developments, but the existing ones are important. Key developments include membrane filtration, microbial fuel cells, nanotechnology, development of biological treatments and natural treatment systems such as wetlands. All these processes are used to make water drinkable or significantly reduce the presence of pollutants from what is discharged into the sea and rivers.

### Elimination of industrial emissions

As experts in the treatment of emissions, the management of air pollutants in industries can significantly reduce the greenhouse effect. Methane and carbon dioxide are substances that harm the environment. Industries such as chemical, petrochemical, pharmaceutical, automotive, etc. must eliminate their emissions so as not to cause serious environmental damage. [Our technology is oriented to create custom solutions for each company.](https://www.tecamgroup.com/exhaust-air-treatment/)

### Recycling and waste management

The increase in household and industrial waste has been disproportionate. Managing solid waste is the commitment of companies as well as individuals. Outstanding technologies such as smart containers, automated food waste tracking systems and automated optical scanning technologies can help sort mixed plastics by separating them from others.

## Advantages:

While the procurement and installation costs of green buildings might be slightly more expensive initially, the long-term benefits are more reasonable for your business overall. These particular types of technologies are designed to use resources more efficiently, which in turn, leads to reduced costs for owners. Many companies are realizing the need for green technologies and are slowly adopting such methods in their businesses. For instance, buildings that incorporate solar energy systems use up to 70% less electricity than conventional systems, this according to the U.S Department of Energy.

Perhaps the single most significant benefit of building utilizing green solutions is the environmental impact. Conventional technologies, such as petroleum generators for example, cause extensive damage to the environment, thus making it essential that businesses opt for green technologies. In particular, green technology helps reduce a business’ carbon footprint, reduces waste, conserves water and consumes reduced energy as compared to traditional technologies.

The green energy sector is responsible for a host of job opportunities on the market today. There is a need for people with adequate expertise when it comes to sustainable solutions in the construction industry. The green energy sector is a developing market niche that is here to stay for many generations to come. As a result, many employment options come up for people, and some of them include environmental health engineers, solar energy experts, and efficient lighting experts as well.

## Disadvantages:

The aim of going green in many cases, such as building an energy-efficient home or purchasing a hybrid vehicle, is to reduce environmental impact while saving money in the long term. Green buildings and vehicles tend to use less energy, so initial costs can often be recouped over time through energy savings. The problem is that the savings generated by going green are often less than expected; they do not make up for the initial cost quickly enough to make them economically viable

In the business world, going green can be an attractive goal to gain goodwill and consumer support, but unless green improvements are economically viable, it can put a business at a competitive disadvantage. For instance, if one company decides to adhere to strict, self-imposed pollution standards which require the installation of new technology and workers, while another sets loose standards, the second company will be at an advantage since they will have lower production costs. Even if national standards were imposed to force businesses to go green, this could put them at a competitive disadvantage with respect to foreign companies



Figure 1

# PRACTICAL NO:3

# FREE AND OPEN SOURCE SOFTWARE

## Defination:

Free and open-source software (FOSS) allows users and programmers to edit, modify or reuse the software's source code. This gives developers the opportunity to improve program functionality by modifying it. The term “free” indicates that the software does not have constraints on copyrights. The term “open source” indicates the software is in its project form, enabling easy software development from expert developers collaborating worldwide without any need for reverse engineering. Free and open-source software may also be referred to as free/libre open-source software (FLOSS) or free/open-source software (F/OSS).

## Advantages:

Today open source software has become critical for almost every organization. Almost everything requires open source software, be it telecommunication systems, inventory, accounting, personal productivity applications, contact management and operating systems amongst others. At Outsource2india, we have experienced and skilled software engineers who can proficiently build a software system by using open source software. With our expertise in java development, we can also develop application blocks. We also use our system integration services to make sure that the new application that we create can be easily integrated with your existing systems. Outsource open source software development to O2I and benefit from high-quality services at a cost-effective price.

Open source software can have a major impact on your entire organization. There are several advantages of using open source software. The following are a list of the advantages of opting for open source software.

### Lesser hardware cost:

Since Linux and open source solutions are easily portable and compressed, it takes lesser hardware power to carry out the same tasks when compared to the hardware power it takes on servers, such as, Solaris, Windows or workstations. With this less hardware power advantage, you can even use cheaper or older hardware and still get the desired results.

### High-quality software

Open source software is mostly high-quality software. When you use the open source software, the source code is available. Most open source software are well-designed. Open source software can also be efficiently used in coding. These reasons make open source software an ideal choice for organizations**.**

### No vendor lock-in

IT managers in organizations face constant frustration when dealing with vendor lock-ins'. Lack of portability, expensive license fees and inability to customize software are some of the other disadvantages. Using open source software gives you more freedom and you can effectively address all these disadvantages.

## Disadvantages:

Open source software may benefit many businesses. However, it can also pose several significant challenges – from unexpected costs and steep learning curve to complex compatibility issues.

The main disadvantages of open source software relate to:

**The difficulty of use:**

Some open source applications may be tricky to set up and use. Others may lack user-friendly interfaces or features that your staff may be familiar with. This can affect productivity and prevent your staff from adopting or using programs with ease.

Compatibility issues:

Many types of proprietary hardware need specialised drivers to run open source programs, which are often only available from the equipment manufacturer. This can potentially add to the cost of your project. Even if an open source driver exists, it may not work with your software as well as the proprietary driver.

Liabilities and warranties:

With proprietary software, the developer usually provides indemnification and warranty as part of a standard license agreement. This is because they fully control and copyright the product and its underlying code. Open source software licenses’ typically contain only limited warranty and no liability or infringement indemnity protection.

### ****Hidden costs**** :

Software that is free up-front but later costs money to run can be a major burden, especially if you haven't considered hidden costs from the outse

### Scope:

Open source software is everywhere, both as specialized applications nurtured by devoted user communities, and as digital infrastructure underlying platforms used by millions daily. This type of software is developed, maintained, and extended both within the private sector and outside of it, through the contribution of people from businesses, universities, government research institutions, nonprofits, and as individuals. This paper proposes and prototypes a method to document the scope and impact of open source software created by these sectors, thereby extending existing measures of publicly-funded research output. We estimate the cost of developing packages for the open source software languages R, Python, Julia, and JavaScript, as well as re-use statistics for R packages. These reuse statistics are measures of relative value. We estimate that the resource cost for developing R, Python, Julia, and JavaScript exceeds $3 billion dollars, based on 2017 costs

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| Free software | Open source software |
| It is available free of cost and user can get it anytime | It is not editable it requires licence |



## Figure 1

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