Comparison of abstract classes and Interfaces

- Interface and Abstract class are Executable.

```
package practice;
public interface InterfaceExample
{
  public static void main(String[] args)
   {
    System.out.println("Interface is Executable!");
   }
}
```

Output: Interface is Executable!

```
package practice;
public abstract class AbstractClassExample
{
  public static void main(String[] args)
   {
    System.out.println("Abstract class is
                                Executing!");
    }
}
```

Output: Abstract class is Executing!

- Interface can have a variable. variable inside interface can be public, static, final. if we didn't declare variable as public, static, final. then also it is treated as public, static, final.
- Interface can also have a abstract method.
- Interface can also have a static method.
- Interface can also have a default method.
- Interface can also have a main method.
- Interface can also have a

```
package practice;
public interface InterfaceExample
{
 public static final int x=10;
 int y=20; //public static final int y=20;
 public abstract void fun1()
 void fun2(); //public abstract void fun2();
 public static void fun3(){
  System.out.println("This is static method");
 }
 public default void fun4(){
  System.out.println("This is default
                      method");
 }
public AbstractClassExample(){
  system.out.println("This is Constructor");
 }
static {
  System.out.println("This is static Block");
 }
public static void main(String[] args){
  System.out.println("This is main method");
 }
}
```

- Abstract class can have reference variable.

```
public abstract class AbstractClassExample
{
 public static void main (String[] args)
  {
   AbstractClassExample ref;
  }
}
```

- Interface can have reference variable.

```
public interface InterfaceExample
 {
  public static void main (String[] args)
   {
    InterfaceExample ref;
   }
  }
```

- We can not Create an Object of interface.

```
package practice;
public interface InterfaceExample
{
 public static void main(String[] args)
 {
  InterfaceExample ref = new InterfaceExample(); //Error
 }
}
```

- We can not Create an Object of Abstract Class.

```
package practice;
public abstract class AbstractClassExample
{
 public static void main (String[] args)
 {
  AbstractClassExample ref=new AbstractClassExample();
 }
}
```