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Failure to put your name and ID will result in a 2-point deduction from your grade.

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NO ATTRIB
NO INTERFACES

5.8/10

COE312 - Quiz 1
Time: 30 minutes
Total Points: 10

The quiz open book and notes and you can use the Internet. You are not allowed to consult other individuals or your classmates.

PLEASE UPLOAD YOUR ANSWER USING THIS **WORD** FILE. DO NOT UPLOAD ANY ZIPPED OR PDF FILE. THIS WORD FILE ONLY.

The question(s) have been written in a manner such that **it is not possible for two students to have the same solution**. Therefore, please refrain from the temptation of copying code and changing order of and names of variables, etc. AUS code of conduct will be strictly enforced, and no violation will be tolerated as per AUS policy. Please note that the AUS code

First came the four, the free
Eldest of all, the elf-children
Dwarf the delver, dark are his
Ent the earthborn, old as
Man the mortal, master of



peoples

houses
mountains
horses

In J. R. R. Tolkien's fictional fantasy
there are four types of free people; elf,

world of middle earth,
dwarf, ent and men.

Here are some characteristics of each race.

Elves cannot become sick or scarred.

Ents are tree-like creatures.

Dwarves mine and work precious metals.

Q1. (10 points) Develop a Java class hierarchy to model the free people and show in a sample program how an individual of each race is created. Ensure that each instance can be printed *nice*ly and print one instance of each class. Include as many reasonable attributes as possible for each class.

Please provide 1) formatted code, and 2) screenshots of your running program. **Not providing a screenshot (with or without errors) will limit your score to below 3/10.**

Solution: (Paste formatted code here).

```
public class quiz {
```

```
    public static void main(String[] args) {
```

```
        ent e = new ent();
        men m = new men();
        elves el = new elves();
        dwarves d = new dwarves();
```

```
        e.creation();
```

```
        m.creation();
```

```
        d.creation();
```

```
        el.creation();
```

```
    }
```

```
}
```

```
public class race {
```

```
    String origin;
    String characteristics;
```

```
    public race()
    {
```

```
        origin = "";
        characteristics = "";
```

```
    }
```

```
    public String toString()
```

```
    {
```

system.out(e)

Age etc.

```

        return (origin + characteristics);
    }

}

public class ent extends race{
    ✓
    public void creation() to String();
    {
        System.out.print("Ent are tree like creatures\n");
        System.out.print("They are earth born, old as
mountain\n");
    }
}

```

```

@Override
public String toString()
{
    return (super.origin + super.characteristics );
}
}
    OK

```

```

public class men extends race{

    public void creation()
    {
        System.out.print("Men are mortal, master of
horses\n");
    }
}

```

```

@Override
public String toString()
{
    return (super.origin + super.characteristics );
}
}

```

```

public class elves extends race{

```

```

    public void creation()
    {

```

```

        System.out.print("ELves are eldest\n");
        System.out.print("They cannot become sick or
scared\n");
    }

    @Override
    public String toString()
    {
        return (super.origin + super.characteristics );
    }
}

public class dwarves extends race {

    public void creation()
    {
        System.out.print("Dwarves are dwelvers, dark are his
houses\n");
        System.out.print("They mine and work precious metals\
n");
    }

    @Override
    public String toString()
    {
        return (super.origin + super.characteristics );
    }

}

```

Screenshot: (Paste Screenshots here)

If you leave this space empty please expect at most 3/10 score.

<terminated> quiz [Java Application] /Library/Java/JavaVirtualMachines/jdk-14.0.2.jdk/

They are earth born, old as mountain

Men are mortal, master of horses

Dwarves are dwellers, dark are his houses

They mine and work precious metals

Elves are eldest

They cannot become sick or scared

