

Impetus Technical Paper

1. Conversion of no. from base 2 to base 32.
2. In multi-user system a process in RUNNING state will move to state after time out.
 - Blocked
 - Suspended
 - Terminated
3. In multi-user system files f1, f2, f3, f4, f5 of size 200, 100, 50, 80, 150 are there. In what way files should be stored to improve access time assuming all files are accessed with same frequency.
 - F1,f5,f2,f4,f3
 - F3,f4,f2,f5,f1
 - Ordering of files does not matter bcoz all files are accessed with same frequency.
4. a database in BCNF will be in
 - 1nf
 - 2nf
 - 3nf
 - all the above
5. find out cover of functional dependency
6. An alternate key is
 - Candidate key but not primary key
 - Candidate key as well as primary key
 - Primary key but not candidate key
 - None of above
7. find out the address of page 0 where each page is of size 1024
Virtual page Original page

0

3

1

2

3

1

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4

8

C/C++ SECTION

1. output of this line `printf("foo","bar");`

- foo
- bar
- foobar
- compile time error

2. `int main()`

```
{  
union  
{  
char ch;  
int i;  
}u;  
u.i=256;  
printf("%d",u.ch);  
}
```

- 0
- 255
- -1
- garbage

3. `class foo`

```
{  
virtual f()  
{  
cout<<"In foo";  
}  
};  
class foo2:public foo  
{  
virtual f(int i)  
{  
cout<<"In foo2";  
}  
};  
void main()
```

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```
{  
foo2 f1;  
f1.f();  
f1.f(1);  
}
```

- compile time error
- In foo2
- In foo

4. class animal

```
{  
virtual speak(int i)  
{  
cout<<"In animal";  
}  
};  
class cow:public animal  
{  
virtual speak(int i)  
{  
cout<<"In cow";  
}  
};  
class dog: public animal  
{  
virtual speak(short a)  
{  
cout<<"In dog";  
}  
};  
int main()  
{  
animal *p=new dog;  
p->speak(1);  
}
```

- In dog
- In animal
- In cow
- Compile time error.

5. int main()

```
{  
int x=11;  
int &p=x;
```

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```
printf("%u %u",&p,&x);  
}
```

Output-Same Error

JAVA SECTION

1. Java prog well done

Class prog

```
{  
public static void main(String argv[])  
{  
system.out.println(argv[2]);  
}  
}
```

- well
- done
- array bound exception