

Hughes Placement Paper Questions

1: given an expression tree and asked us to write the in fix of that expression four choices

2: global variables in different files are

a) at compile time

b) loading time

c) linking time

d) execution time

3) size of(int)

a) always 2 bytes

b) depends on compiler that is being used

c) always 32 bits

d) can't tell

4) which one will overflow given two programs 2

prog 1: prog2:

main() main()

{ {

int fact; int fact=0

long int x; for(i=1; i<=n; i++)

fact=factorial(x); fact=fact*i;

} }

int factorial(long int x)

{

if(x>1) return(x*factorial(x-1));

}

a) program 1;

b) program 2;

c) both 1 & 2

d) none

}

5) variables of function call are allocated in

- a) registers and stack
- b) registers and heap
- c) stack and heap
- d)

6) avg and worst case time of sorted binary tree

7) data structure used for priority queue

- a) linked list
- b) double linked list
- c) array
- d) tree

8)

```
main(){
```

```
char str[5]="hello";
```

```
if(str==NULL) printf("string null");
```

```
else printf("string not null");
```

```
}
```

what is output of the program?

- a) string is null
- b) string is not null
- c) error in program
- d) it executes but prints nothing

9) there are 5 pipeline and another 12 pipeline stages are there and flushed time taken to execute five instructions

- a) 10,17
- b) 9,16
- c) 25,144
- d)

10) for hashing which is best on terms of buckets

- a) 100

b)50

c)21

d)32

Ans 32

11)

```
void f(int value){  
for (i=0;i<16;i++){  
if(value &0x8000>>1) printf("1")  
else printf("0");  
}  
}
```

what is printed?

a) bineray value of argument b)bcd value c) hex value d) octal value

12)

```
void f(int *p){  
static val=100;  
val=&p;  
}  
main(){  
int a=10;  
printf("%d ",a);  
f(&a);  
printf("%d ",a);  
}
```

what will be out put?

a)10,10

13)

struck a{

int x;

```
float y;  
char c[10];  
}
```

```
union b{  
int x;  
float y;  
char c[10];  
}
```

which is true?

a) $\text{sizeof}(a) \neq \text{sizeof}(b)$;

b)

c)

d)

14)

```
# define f(a,b) a+b
```

```
#define g(c,d) c*d
```

find value of $f(4, g(5,6))$

a) 26

b) 51

c)

d)

15)

find avg access time of cache

a) $t_c * h + (1-h) * t_m$

b) $t_c H + t_m H$

c)

d) t_c is time to access cache t_m is time to access when miss occurs

16)

```
main()
```

```
{
char a[10]="hello";
strcpy(a,'\0');
printf("%s",a);
}
```

out put of the program?

a) string is null b) string is not null c) program error d)

17)

simplyfy k map

1 x x 0

1 x 0 1

18)

```
int f(int a)
```

```
{
a=+b;
//some stuff
}
```

```
main()
```

```
{
x=fn(a);
y=&fn;
```

what are x & y types

a) x is int y is pointer to a function which takes integer value

19)

```
char a[5][15];
```

```
int b[5][15];
```

address of a 0x1000 and b is 0x2000 find address of a[3][4] and b[3][4]

assume char is 8 bits and int is 32 bits