Array

1. What will be the o/p of following code

Consider base address of array 6004 and base address
Of array of pointer arr as 9016

```c
#include<stdio.h>
Int main()
{
int a=10,b=20,c=30;
int* arr[3]={&a,&b,&c};
printf("%d\t%d\t%d\n",a,b,c);
printf("%u\t%u\t%u\n",*(*arr+1),*arr+2,*arr+3);
return 0;
}
```

Answers

1. 10 20 30 20 9024 9028

2. 10 20 30 20 garbage 9028

3. Compile time error

4. 10 20 30 20 0 0

2. What will be the ooutput

```c
#include<stdio.h>
void sample(int**);
int main()
{
int arr[3][4]={{1,2,3,4},{4,3,2,8},{7,8,9,0}};
int *ptr;
ptr=&arr[0][0];
sample(&ptr);
return 0;
}
void sample(int **p)
{
        printf("%d",**p);
}
```

Answers

1. 1

2. Compile time error

3. Run time error terminated with -1

4. 2

3. What will be the output

```c
#include<stdio.h>
int main()
{
int mat3[][] = { { 1, 2, 3 }, { 4, 5, 6 }, { 7, 8, 9 } };
int r, c;
printf("\n Enter Elements of Matrix :: \n");
for (r = 0; r < 3; r++)
{
        for (c = 0; c < 3; c++)
        {
                scanf("%d", &mat3[r][c]);
        }
}
for (r = 0; r < 3; r++)
{
        for (c = 0; c < 3; c++)
        {
                printf("%d", mat3[r][c]);
        }
        return 0;
}
}
```

Answers

1. Compile time error

4. What will be the output

```c
#include<stdio.h>
Int main()
{
int a[]={0,1,2,3,4};
int *p[]={a,a+1,a+2,a+3,a+4};
int **ptr=p;
ptr++;
printf("%d%d%d",ptr-p,*ptr-a,**ptr);
return 0;
}
```

Answers

1. 2 2 2

2. 1 1 1

3. 4 4 4

4. Compile time error

5. What will be the output considering 64 bit machine

```c
#include<stdio.h>
int main()
{
char *value[]={"SunbeamKarad","SunbeamPune","IACSD","KnowIT"};
printf("%d%d",sizeof(value),sizeof(value[1]));
return 0;
}
```

Answers

1. 8 8

2. 32 8

3. 32 32

4. 1 32

6. What will be the o/p if it is executed from command line
As prog 40 50 60

```c
#include<stdio.h>
int main(int argc,char** argv)
{
int i;
for(i=0;i<argc;i++)
{
        printf("%s",argv[i]);
        printf("\n");
}
return 0;
}
```

Answers

1. Programname Prog 40 50 50

2. Programname Prog 40 50 60

3. Prog 40 50 0 programname

4. 40 50 60 prog 0

7. What will be the o/p of following program if it is executed

At command line as

i/p-sample

```c
#include<stdio.h>
int main(int argc,char** argv)
{
printf("%s\n",argv[argc-1]);
return 0;
}
```

Answers

1. ./sample.out

2. Null

3. Compile time error

4. 1

8. What will be the output

```c
#include<stdio.h>
int main()
{
int arr[3][3]={{2,4,3},{6,8,5},{11,5,1}};
int *ptr;
ptr=arr;
printf("%d\n",ptr[2]);
printf("%d\n",*arr[2]+2);
return 0;
}
```

Answers

1. 3 8

2. 3 13

3. Compile Time Error

4. 3 5

9. What will be the o/p if it is executed from command line
As prog friday tuesday sunday

```c
#include<stdio.h>
int main(int argc,char** argv)
{
printf("%c\n",*++argv[1]);
return 0;
}
```

Answers

1. r

2. f

3. t

4. s

10. What will bee the output
Consider base address of array 6004 and base address
Of array of pointer p as 9016

```c
#include<stdio.h>
int main()
{
int a[]={0,1,2,3,4};
int *p[]={a,a+1,a+2,a+3,a+4};
int **ptr=p;
printf("%u\t%u\n",a,*a);
printf("%u\t%u\n",p,*p);
return 0;
}
```

Answers

1. 6004 0 9016 6004

2. 6004 0 9016 0

3. 6004 0 9016 6004

4. 0 0 9016 6004